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FILE COVERS 1907 - 11 May 2005 VOL 142 ISS 20 FILE LAST UPDATED: 10 May 2005 (20050510/ED)

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This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d stat que L13

10 SO2G2 2 11 1 G1 7 C 8 3 7 C 8 6 G1 6 G1 4 9 G4 G5 5 12 13

STR

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C
C
@29

33
C
N
C
32
@31

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REP G4 = (0-3) C

VAR G5=18/19/20/23/24/29/30/31

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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

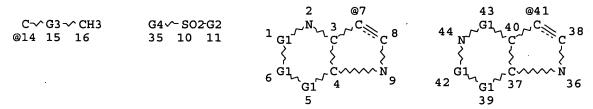
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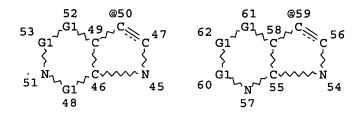
NUMBER OF NODES IS 34

STEREO ATTRIBUTES: NONE

L15 152 SEA FILE=REGISTRY SSS FUL L13

L16 STR





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VAR G2=ME/ET/I-PR/N-PR/I-BU/N-BU/T-BU/S-BU/14/CY

REP G3 = (3-4) C VAR G4=7/41/50/59

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 42

STEREO ATTRIBUTES: NONE

L17 52 SEA FILE=REGISTRY SUB=L15 SSS FUL L16 L18 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L17

=> =>

=> d ibib abs hitstr l18 1

L18 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:80697 HCAPLUS

DOCUMENT NUMBER:

140:146118

TITLE:

Preparation of heterocyclylalkyl-sulfonylazaindole or -azaindazole derivatives 5-hydroxytryptamine-6 (5-HT6)

ligands

INVENTOR (S):

Bernotas, Ronald Charles; Lenicek, Steven Edward;

Elokdah, Hassan Mahmoud; Li, David Zenan

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE ---------_____ -----WO 2004009600 20030717 A1 20040129 WO 2003-US22506 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG CA 2491251 AΑ 20040129 CA 2003-2491251 20030717 US 2004023970 **A1** 20040205 US 2003-621432 20030717 PRIORITY APPLN. INFO.: US 2002-396949P P 20020718 WO 2003-US22506 20030717

OTHER SOURCE(S):

MARPAT 140:146118

I

R3 (n) n | N | R5

AB Title compds. I [W, X, Y, Z, Q = N, substituted C; R1 = (cyclo)alkyl, (hetero)aryl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3-4 = H, alkyl; R5 = H, alk(en/yn)yl, etc.; R6 = alk(en/yn)yl, cycloalkyl, etc.; R7-8 = H, alk(en/yn)yl, cycloalkyl, etc.; m, n = 0-3; p = 0-2] are prepared For instance, 3-(Phenylsulfonyl)-1H-pyrrolo[2,3-b]pyridine (preparation given) is reacted with tert-Bu (2R)-2-[[(4-methylphenyl)sulfonyl]oxy]methyl]-1-pyrrolidinecarboxylate (i. DMF, NaH, 0°; ii. dioxane, HCl, 4 h) to give II•HCl. II has Ki = 12 nM for the 5-HT6 receptor. I are useful for treatment of a central nervous system disorder related to or affected by the 5-HT6 receptor.

IT 651024-27-0P, 1-[(1-Benzylpyrrolidin-2-yl)methyl]-3-(3chlorophenylsulfonyl)pyrrolo[2,3-b]pyridine 651024-28-1P,
3-(3-Chlorobenzenesulfonyl)-1-((pyrrolidin-2-yl)methyl)pyrrolo[2,3-b]pyridine

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 1-heterocyclylalkyl-3-sulfonylazaindole or -azaindazole derivs. 5-hydroxytryptamine-6 (5-HT6) ligands)

RN 651024-27-0 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-chlorophenyl)sulfonyl]-1-[[1-(phenylmethyl)-2-pyrrolidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 651024-28-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-chlorophenyl)sulfonyl]-1-(2-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

651024-24-7P, (-)-(R)-3-(Phenylsulfonyl)-1-(pyrrolidin-2ylmethyl)pyrrolo[2,3-b]pyridine hydrochloride 651024-25-8P, (+)-(S)-3-(Phenylsulfonyl)-1-(pyrrolidin-2-ylmethyl)pyrrolo[2,3-b]pyridine Hydrochloride 651024-29-2P, 3-(3-Chlorophenylsulfonyl)-1-[(1methylpyrrolidin-2-yl)methyl]pyrrolo[2,3-b]pyridine hydrochloride 651024-30-5P, 3-(Phenylsulfonyl)-1-[(1-benzylpyrrolidin-2yl)methyl]pyrrolo[2,3-b]pyridine hydrochloride 651024-31-6P, 3-(3-Fluorophenylsulfonyl)-1-[(1-benzylpyrrolidin-2-yl)methyl]pyrrolo[2,3b]pyridine hydrochloride 651024-32-7P, 3-(3-Fluorophenylsulfonyl) -1-[(pyrrolidin-2-yl)methyl]pyrrolo[2,3-b]pyridine hydrochloride 651024-33-8P, 3-(3-Fluorophenylsulfonyl)-1-{(1methylpyrrolidin-2-yl)methyl]pyrrolo[2,3-b]pyridine hydrochloride 651024-34-9P, 3-[(6-Chloroimidazo[2,1-b]thiazol-5-yl)sulfonyl]-1-[(1-benzylpyrrolidin-2-yl)methyl]pyrrolo[2,3-b]pyridine 651024-35-0P, 3-[(6-Chloroimidazo[2,1-b]thiazol-5-yl)sulfonyl]-1-[(pyrrolidin-2-yl)methyl]pyrrolo[2,3-b]pyridine hydrochloride 651024-36-1P, 3-[(5-Chlorothiophen-2-yl)sulfonyl]-1-[(pyrrolidin-2yl)methyl]pyrrolo[2,3-b]pyridine hydrochloride 651024-37-2P, 3-[(5-Chlorothiophen-2-yl)sulfonyl]-1-[(1-benzylpyrrolidin-2yl)methyl]pyrrolo[2,3-b]pyridine hydrochloride 651024-40-7P, 3-[(6-Chloroimidazo[2,1-b]thiazol-5-yl)sulfonyl]-1-(1-methylpiperidin-3yl)pyrrolo[2,3-b]pyridine 651024-41-8P, 3-[(4-Methylphenyl) sulfonyl] -1-((piperidin-4-yl) methyl) pyrrolo[2,3-b] pyridine 651024-42-9P, 7-Methoxy-3-(phenylsulfonyl)-1-(piperidin-4ylmethyl)pyrrolo[2,3-c]pyridine 651024-43-0P,

```
6-Hydroxy-3-(phenylsulfonyl)-1-(piperidin-4-ylmethyl)-1H-pyrrolo[3,2-
b]pyridine 651024-44-1P, 6-Fluoro-3-[(3-fluorophenyl)sulfonyl]-1-
((piperidin-4-yl)methyl)-1H-pyrrolo[3,2-b]pyridine 651024-45-2P,
3-[(2-Fluorophenyl)sulfonyl]-6-methoxy-1-((piperidin-4-yl)methyl)-1H-
pyrrolo[3,2-b]pyridine 651024-46-3P, 4-Chloro-3-(phenylsulfonyl)-
1-(piperidin-3-ylmethyl)pyrrolo[2,3-b]pyridine 651024-47-4P,
7-Methoxy-3-(phenylsulfonyl)-1-(piperidin-3-ylmethyl)pyrrolo[2,3-
c]pyridine 651024-48-5P, 6-Hydroxy-3-(phenylsulfonyl)-1-
(piperidin-3-ylmethyl)-1H-pyrrolo[3,2-b]pyridine 651024-49-6P,
6-Chloro-3-[(4-fluorophenyl)sulfonyl]-1-((piperidin-2-yl)methyl)-1H-
pyrrolo[3,2-c]pyridine 651024-50-9P, 6-Fluoro-3-[(3-
fluorophenyl) sulfonyl] -1-((piperidin-2-yl) methyl) pyrrolo[2,3-b] pyridine
651024-51-0P, 5-Chloro-3-[(3-chlorophenyl)sulfonyl]-1-((piperidin-
2-yl)methyl)pyrrolo[2,3-c]pyridine 651024-52-1P,
3-[(2-Chlorophenyl)sulfonyl]-6-fluoro-1-((piperidin-2-yl)methyl)-1H-
pyrrolo[3,2-b]pyridine 651024-53-2P, 3-[(2-
Fluorophenyl)sulfonyl]-6-methoxy-1-((piperidin-2-yl)methyl)-1H-pyrrolo[3,2-
c]pyridine 651024-59-8P, 6-Bromo-3-(phenylsulfonyl)-1-
(pyrrolidin-3-ylmethyl)-1H-pyrrolo[3,2-c]pyridine 651024-60-1P,
4-Chloro-2-methyl-3-(phenylsulfonyl)-1-(pyrrolidin-2-ylmethyl)pyrrolo{2,3-
b]pyridine 651024-61-2P, 7-Methoxy-3-(phenylsulfonyl)-1-
(pyrrolidin-2-ylmethyl)pyrrolo[2,3-c]pyridine 651024-62-3P,
6-Hydroxy-3-(phenylsulfonyl)-1-(pyrrolidin-2-ylmethyl)-1H-pyrrolo[3,2-
b]pyridine 651024-63-4P, 1-(Piperidin-2-ylmethyl)-3-(2-
pyridinylsulfonyl)-1H-pyrrolo[3,2-c]pyridine 651024-64-5P,
1-(Piperidin-3-ylmethyl)-3-(2-pyridinylsulfonyl)pyrrolo[2,3-b]pyridine
651024-65-6P, 3-(2-Pyridinylsulfonyl)-1-((pyrrolidin-3-
yl) methyl) pyrrolo [2,3-c] pyridine 651024-71-4P,
1-(1-Phenethylpyrrolidin-3-yl)-3-(phenylsulfonyl)-1H-pyrrolo[3,2-
c]pyridine 651024-72-5P, 1-Piperidin-4-yl-3-(2-
pyridylsulfonyl)pyrrolo[2,3-c]pyridine 651024-73-6P,
1-Piperidin-3-yl-3-(2-thienylsulfonyl)-1H-pyrrolo[3,2-b]pyridine
651024-74-7P, 1-Pyrrolidin-3-yl-3-(3-thienylsulfonyl)-1H-
pyrrolo[3,2-b]pyridine 651024-75-8P, 1-[(1-Benzylpyrrolidin-2-
yl)methyl]-3-(phenylsulfonyl)pyrrolo[2,3-b]pyridine 651024-76-9P
, 3-(Phenylsulfonyl)-1-(pyrrolidin-2-ylmethyl)pyrrolo[2,3-b]pyridine
651024-77-0P, 1-[(1-Benzylpyrrolidin-2-yl)methyl]-3-(3-
fluorophenylsulfonyl)pyrrolo[2,3-b]pyridine 651024-78-1P,
3-(3-Fluorophenylsulfonyl)-1-((pyrrolidin-2-yl)methyl)pyrrolo[2,3-
b]pyridine 651024-79-2P, 3-(3-Chlorophenylsulfonyl)-1-[(1-
methylpyrrolidin-2-yl)methyl]pyrrolo[2,3-b]pyridine 651024-80-5p
 3-[(6-Chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1-(pyrrolidin-2-
ylmethyl)pyrrolo[2,3-b]pyridine 651024-81-6P,
3-[(6-Chloroimidazo[2,1-b][1,3]thiazol-5-yl)sulfonyl]-1-(piperidin-3-
yl)pyrrolo[2,3-b]pyridine 651024-82-7P, 3-[(5-Chlorothiophen-2-
yl)sulfonyl]-1-((pyrrolidin-2-yl)methyl)pyrrolo[2,3-b]pyridine
651310-86-0P 651310-90-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of 1-heterocyclylalkyl-3-sulfonylazaindole or -azaindazole
   derivs. 5-hydroxytryptamine-6 (5-HT6) ligands)
651024-24-7 HCAPLUS
1H-Pyrrolo[2,3-b]pyridine, 3-(phenylsulfonyl)-1-[(2R)-2-
pyrrolidinylmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)
```

Absolute stereochemistry. Rotation (-).

RN

CN

RN 651024-25-8 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-(phenylsulfonyl)-1-[(2S)-2-pyrrolidinylmethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● HCl

RN 651024-29-2 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-chlorophenyl)sulfonyl]-1-[(1-methyl-2-pyrrolidinyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 651024-30-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 1-[[1-(phenylmethyl)-2-pyrrolidinyl]methyl]-3(phenylsulfonyl)-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 651024-31-6 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-fluorophenyl)sulfonyl]-1-[[1-(phenylmethyl)-2-pyrrolidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 651024-32-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-fluorophenyl)sulfonyl]-1-(2-pyrrolidinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 651024-33-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-fluorophenyl)sulfonyl]-1-[(1-methyl-2-pyrrolidinyl)methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

HCl

RN 651024-34-9 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(6-chloroimidazo[2,1-b]thiazol-5-yl)sulfonyl]-1-[[1-(phenylmethyl)-2-pyrrolidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 651024-35-0 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(6-chloroimidazo[2,1-b]thiazol-5-yl)sulfonyl]-1-(2-pyrrolidinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

RN 651024-36-1 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(5-chloro-2-thienyl)sulfonyl]-1-(2-pyrrolidinylmethyl)-, monohydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 651024-37-2 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(5-chloro-2-thienyl)sulfonyl]-1-[[1-(phenylmethyl)-2-pyrrolidinyl]methyl]-, monohydrochloride (9CI) (CA INDEX NAME)

RN 651024-40-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(6-chloroimidazo[2,1-b]thiazol-5-yl)sulfonyl]-1-(1-methyl-3-piperidinyl)- (9CI) (CA INDEX NAME)

RN 651024-41-8 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(4-methylphenyl)sulfonyl]-1-(4-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-42-9 HCAPLUS

CN 1H-Pyrrolo[2,3-c]pyridine, 7-methoxy-3-(phenylsulfonyl)-1-(4-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-43-0 HCAPLUS

CN 1H-Pyrrolo[3,2-b]pyridin-6-ol, 3-(phenylsulfonyl)-1-(4-piperidinylmethyl)-(9CI) (CA INDEX NAME)

RN 651024-44-1 HCAPLUS

CN 1H-Pyrrolo[3,2-b]pyridine, 6-fluoro-3-[(3-fluorophenyl)sulfonyl]-1-(4-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-45-2 HCAPLUS

CN 1H-Pyrrolo[3,2-b]pyridine, 3-[(2-fluorophenyl)sulfonyl]-6-methoxy-1-(4-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-46-3 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-3-(phenylsulfonyl)-1-(3-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-47-4 HCAPLUS
CN 1H-Pyrrolo[2,3-c]pyridine, 7-methoxy-3-(phenylsulfonyl)-1-(3-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-48-5 HCAPLUS
CN 1H-Pyrrolo[3,2-b]pyridin-6-ol, 3-(phenylsulfonyl)-1-(3-piperidinylmethyl)(9CI) (CA INDEX NAME)

RN 651024-49-6 HCAPLUS

CN 1H-Pyrrolo[3,2-c]pyridine, 6-chloro-3-[(4-fluorophenyl)sulfonyl]-1-(2-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-50-9 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 6-fluoro-3-[(3-fluorophenyl)sulfonyl]-1-(2-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-51-0 HCAPLUS

CN 1H-Pyrrolo[2,3-c]pyridine, 5-chloro-3-[(3-chlorophenyl)sulfonyl]-1-(2-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-52-1 HCAPLUS

CN 1H-Pyrrolo[3,2-b]pyridine, 3-[(2-chlorophenyl)sulfonyl]-6-fluoro-1-(2-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-53-2 HCAPLUS

CN 1H-Pyrrolo[3,2-c]pyridine, 3-[(2-fluorophenyl)sulfonyl]-6-methoxy-1-(2-piperidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-59-8 HCAPLUS

CN 1H-Pyrrolo[3,2-c]pyridine, 6-bromo-3-(phenylsulfonyl)-1-(3-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-60-1 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 4-chloro-2-methyl-3-(phenylsulfonyl)-1-(2-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-61-2 HCAPLUS

CN 1H-Pyrrolo[2,3-c]pyridine, 7-methoxy-3-(phenylsulfonyl)-1-(2-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-62-3 HCAPLUS

CN 1H-Pyrrolo[3,2-b]pyridin-6-ol, 3-(phenylsulfonyl)-1-(2-pyrrolidinylmethyl)-(9CI) (CA INDEX NAME)

$$O = S - Ph$$

$$N - CH_2 - N$$

RN 651024-63-4 HCAPLUS

CN 1H-Pyrrolo[3,2-c]pyridine, 1-(2-piperidinylmethyl)-3-(2-pyridinylsulfonyl)(9CI) (CA INDEX NAME)

RN 651024-64-5 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 1-(3-piperidinylmethyl)-3-(2-pyridinylsulfonyl)(9CI) (CA INDEX NAME)

RN 651024-65-6 HCAPLUS

CN 1H-Pyrrolo[2,3-c]pyridine, 3-(2-pyridinylsulfonyl)-1-(3-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-71-4 HCAPLUS

CN 1H-Pyrrolo[3,2-c]pyridine, 1-[1-(2-phenylethyl)-3-pyrrolidinyl]-3-

(phenylsulfonyl) - (9CI) (CA INDEX NAME)

RN 651024-72-5 HCAPLUS CN 1H-Pyrrolo[2,3-c]pyridine, 1-(4-piperidinyl)-3-(2-pyridinylsulfonyl)-(9CI) (CA INDEX NAME)

RN 651024-73-6 HCAPLUS CN 1H-Pyrrolo[3,2-b]pyridine, 1-(3-piperidinyl)-3-(2-thienylsulfonyl)- (9CI) (CA INDEX NAME)

RN 651024-74-7 HCAPLUS CN 1H-Pyrrolo[3,2-b]pyridine, 1-(3-pyrrolidinyl)-3-(3-thienylsulfonyl)- (9CI) (CA INDEX NAME)

RN 651024-75-8 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 1-[[1-(phenylmethyl)-2-pyrrolidinyl]methyl]-3-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

RN 651024-76-9 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-(phenylsulfonyl)-1-(2-pyrrolidinylmethyl)-(9CI) (CA INDEX NAME)

$$O = S - Ph$$

$$N - CH_2 - N$$

RN 651024-77-0 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-fluorophenyl)sulfonyl]-1-[[1-(phenylmethyl)-2-pyrrolidinyl]methyl]- (9CI) (CA INDEX NAME)

RN 651024-78-1 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-fluorophenyl)sulfonyl]-1-(2-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-79-2 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(3-chlorophenyl)sulfonyl]-1-[(1-methyl-2-pyrrolidinyl)methyl]- (9CI) (CA INDEX NAME)

RN 651024-80-5 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(6-chloroimidazo[2,1-b]thiazol-5-yl)sulfonyl]-1-(2-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651024-81-6 HCAPLUS CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(6-chloroimidazo[2,1-b]thiazol-5-

yl)sulfonyl]-1-(3-piperidinyl)- (9CI) (CA INDEX NAME)

RN 651024-82-7 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-[(5-chloro-2-thienyl)sulfonyl]-1-(2-pyrrolidinylmethyl)- (9CI) (CA INDEX NAME)

RN 651310-86-0 HCAPLUS
CN 1H-Pyrrolo[2,3-b]pyridine, 3-(phenylsulfonyl)-1-[(2R)-2-pyrrolidinylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

RN 651310-90-6 HCAPLUS

CN 1H-Pyrrolo[2,3-b]pyridine, 3-(phenylsulfonyl)-1-[(2S)-2pyrrolidinylmethyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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=> d stat que

52 SEA FILE=HCAPLUS ABB=ON PLU=ON ("BERNOTAS R"/AU OR "BERNOTAS ROKAS"/AU OR "BERNOTAS RONALD"/AU OR "BERNOTAS RONALD C"/AU OR

"BERNOTAS RONALD CHARLES"/AU)

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L25 ANSWER 1 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

3

ACCESSION NUMBER:

2005:183904 HCAPLUS

TITLE:

Diastereoselectivity in the cycloaddition of 1-benzyl-2-piperazinone nitrone with alkenes Bernotas, Ronald C.; Sing, Lily; Friedrich,

AUTHOR (S):

Dirk

CORPORATE SOURCE:

Aventis Pharmaceuticals, Bridgewater, NJ, 08807, USA

SOURCE:

Synthesis (2005), (3), 465-469

PUBLISHER:

CODEN: SYNTBF; ISSN: 0039-7881

Georg Thieme Verlag

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GI

CH₂Ph
N
O
H
Ph I

AB The diastereoselectivity of the [2 + 3]-cycloaddn. of 1-benzyl-2-piperazinone nitrone with several alkenes has been examined Exo-Type

cycloadducts, e.g., I, predominated for most substrates.

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 2 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:130297 HCAPLUS

DOCUMENT NUMBER: 142:373637

TITLE: 4-(2-Aminoethoxy)-N-(phenylsulfonyl)indoles as novel

5-HT6 receptor ligands

AUTHOR(S): Zhou, Ping; Yan, Yinfa; Bernotas, Ronald;

Harrison, Boyd L.; Huryn, Donna; Robichaud, Albert J.;

Zhang, Guo Ming; Smith, Deborah L.; Schechter, Lee E.

CORPORATE SOURCE: Chemical and Screening Science and Neuroscience

Discovery Research, Wyeth Research, Princeton, NJ,

08543-8000, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),

15(5), 1393-1396

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

AB The preparation of a novel class of 4-(2-aminoethoxy)-N-(phenylsulfonyl)indoles

which exhibit high affinity towards the 5-HT6 receptor is reported here. Among these compds., 4-(2-methylaminoethoxy)-N-(phenylsulfonyl)indole showed superior affinity (<math>Ki = 1 nM) towards the 5-HT6 receptor as well as excellent selectivity (>2000-fold) against the closely related subtype

5-HT7 receptor.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 3 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:78234 HCAPLUS

DOCUMENT NUMBER: 142:176841

TITLE: Preparation of sulfonyldihydroimidazopyridinones as

serotonin 5-HT6 ligands

INVENTOR(S): Cole, Derek Cecil; Bernotas, Ronald Charles

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: U.S. Pat. Appl. Publ., 16 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.	KIND	DATE	APPLIC	DATE	
US 2005	020596	A1	20050127	US 200	4-896832	20040722
WO 2005	010003	A1	20050203	WO 200	4-US23221	20040719
₩:	AE, AG, AL,	AM, AT	, AU, AZ,	BA, BB, B	G, BR, BW,	BY, BZ, CA, CH
	CN, CO, CR,	CU, CZ	, DE, DK,	DM, DZ, E	C, EE, EG,	ES, FI, GB, GD
	GE, GH, GM,	HR, HU	, ID, IL,	IN, IS, J	P, KE, KG,	KP, KR, KZ, LC
	LK, LR, LS,	LT, LU	, LV, MA,	MD, MG, M	K, MN, MW,	MX, MZ, NA, NI
	NO, NZ, OM,	PG, PH	, PL, PT,	RO, RU, S	C, SD, SE,	SG, SK, SL, SY
	TJ, TM, TN,	TR, TT	, TZ, UA,	UG, US, U	Z, VC, VN,	YU, ZA, ZM, ZW
RW:	BW, GH, GM,	KE, LS	, MW, MZ,	NA, SD, S	L, SZ, TZ,	UG, ZM, ZW, AM
	AZ, BY, KG,	KZ, MD	, RU, TJ,	TM, AT, B	E, BG, CH,	CY, CZ, DE, DK
						PL, PT, RO, SE
	SI, SK, TR,	BF, BJ	, CF, CG,	CI, CM, G	A, GN, GQ,	GW, ML, MR, NE
	SN, TD, TG			•		
PRIORITY APP	LN. INFO.:			US 200	3-489416P	P 20030723
OTHER SOURCE	(S):	MARPAT	142:1768	41		

AB Title compds. [I; Q = (CR2R3)nNR4R5, Q1, Q2; W = CR1, N; X = CR7, N; Y =CR8, N; Z = CR9, N; R = (substituted) cycloalkyl, aryl, heteroaryl, N-bridgehead bicyclyl, tricyclyl; R1, R7, R8, R9 = H, halo, cyano, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl; R2, R3 = H, (substituted) alkyl; n = 2-5; p = 0-2; R4, R5 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl; NR4R5 = atoms to form a (substituted) 5-8 membered ring; R6 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; dotted line = optional double bond; with provisos], were prepared Thus, N-[2-(dimethylamino)ethyl]pyridine-2,3-diamine (preparation given) was heated with carbonyldiimidazole in DMF for 24 h at 75-80° to give 3-(2-dimethylaminoethyl)-1,3-dihydro-2H-imidazo[4,5-b]pyridin-2-one. This in THF was treated with 3-fluorophenylsulfonyl chloride, diisopropylamine, and DMAP followed by stirring for 12 h to give 3-(2-dimethylaminoethyl)-1-[(3-fluorophenyl)sulfonyl]-1,3-dihydro-2H-imidazo[4,5-b]pyridin-2-one. I bound to serotonin 5-HT6 receptors with Ki = 4-80 nM.

L25 ANSWER 4 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:78225 HCAPLUS

DOCUMENT NUMBER:

142:176840

TITLE:

Preparation of arylsulfonyldihydrobenzimidazolones as

serotonin 5-HT6 receptor ligands.

INVENTOR(S):

Cole, Derek Cecil; Bernotas, Ronald Charles

Wyeth, John, and Brother Ltd., USA PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 20 pp.

CODEN: USXXCO Patent

DOCUMENT TYPE:

LANGUAGE: FAMILY ACC. NUM. COUNT: English

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE				APPLICATION NO.						DATE		
US	2005	 02051	 75		Δ1	-	2005	0127	1	IS 2	 004-:	 8971	 53		2.0	0040	 722
	2005																
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	ВG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	•	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JΡ,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	ΥU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	ŪĠ,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG													
PRIORITY	APP	LN.	INFO	. :					1	JS 2	003-4	1894	17P]	P 20	0030'	723
OTHER SO	URCE	(S):			MARI	PAT	142:	17684	40								

31

AB Title compds. [I; R = (substituted) alkyl, cycloalkyl, naphthyl, heteroaryl, N-bridgehead bicyclyl, tricyclyl; R1 = halo, cyano, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl, etc.; m = 0-3; n = 2-5; p = 0-2; R2, R3 = H, (substituted) alkyl; R4, R5 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R6 = H, (substituted) alkyl, alkenyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl; Q = (CR2R3) nNR4R5, Q1, Q2; dotted line = optional double bond], were prepared Thus, 1-[2-(dimethylamino)ethyl]-1,3-dihydrobenzimidazol-2-one (preparation given) in THF was treated with 5-chlorothien-2-ylsulfonyl chloride, diisopropylethylamine, and dimethylaminopyridine followed by stirring for 16 h to give 1-[(5-chlorothien-2-yl)sulfonyl]-3-[2-(dimethylamino)ethyl]-1,3-dihydro-2H-benzimidazol-2-one. The latter bound to serotonin 5-HT6 receptors with Ki = 43 nM.

L25 ANSWER 5 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:48564 HCAPLUS

DOCUMENT NUMBER:

142:211413

TITLE:

Discovery of 5-Arylsulfonamido-3- (pyrrolidin-2-

ylmethyl) -1H-indole Derivatives as Potent, Selective

5-HT6 Receptor Agonists and Antagonists

AUTHOR (S):

Cole, Derek C.; Lennox, William J.; Lombardi, Sabrina;

Ellingboe, John W.; Bernotas, Ronald C.;

Tawa, Gregory J.; Mazandarani, Hossein; Smith, Deborah L.; Zhang, Guoming; Coupet, Joseph; Schechter, Lee E. Chemical and Screening Sciences, Wyeth Research, Pearl

CORPORATE SOURCE:

River, NY, 10965, USA

SOURCE:

Journal of Medicinal Chemistry (2005), 48(2), 353-356

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal

LANGUAGE: English

5-Arylsulfonylamido-3-(pyrrolidin-2-ylmethyl)-1H-indoles have been identified as high-affinity 5-HT6 receptor ligands. Within this class, several of the (R)-enantiomers were potent agonists having EC50 values of 1 nM or less and functioning as full agonists while the (S)-enantiomers displayed moderate antagonist activity.

REFERENCE COUNT: THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS 21 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:1062658 HCAPLUS

TITLE: A short, novel approach to 2,3,4a,5-tetrahydro-1H-

pyrazino[1,2-a]quinoline-4,6-diones. [Erratum to

document cited in CA142:038216]

AUTHOR (S): Bernotas, Ronald C.

CORPORATE SOURCE: Aventis Pharmaceuticals, Bridgewater, NJ, 08807, USA

SOURCE: Synlett (2004), (14), 2646

CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal; Errata

LANGUAGE: English

ΔR An erratum.

L25 ANSWER 7 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:863092 HCAPLUS

DOCUMENT NUMBER: 142:56116

TITLE: 1-(2-Aminoethyl)-3-(arylsulfonyl)-1H-indoles as novel

5-HT6 receptor ligands

AUTHOR (S): Bernotas, Ronald; Lenicek, Steven; Antane,

Schuyler; Zhang, Guo Ming; Smith, Deborah; Coupet,

Joseph; Harrison, Boyd; Schechter, Lee E.

Chemical and Screening Sciences, Wyeth Research, CORPORATE SOURCE:

Collegeville, PA, 19426, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2004),

14(22), 5499-5502

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:56116

GI

$$R^{1}$$
 R^{3}
 $SO_{2}R^{2}$
 I

Novel 1-(2-aminoethyl)-3-(arylsulfonyl)-1H-indoles I [R1 = H, 5-F, 6-Cl, 6-MeO, 6-CN, 7-MeO, etc.; R2 = Ph, 4-MeC6H4, 3-FC6H4, 2-F3COC6H4, 1-naphthyl, PhCH2; R3 = H, Me; R4, R5 = H, Me; R4R5 = (CH2)5] were prepared Binding assays indicated these compds. are 5-HT6 receptor ligands, among which I (R1 = R3 = H; R2 = 1-naphthyl; R4 = R5 = Me) and I (R1 = R3 = R4 =

H; R2 = 1-naphthyl; R5 = Me) showed high affinity for 5-HT6 receptors with Ki = 3.7 and 5.7 nM, resp.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 8 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

2004:858032 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 142:38216

TITLE: A short, novel approach to 2,3,4a,5-tetrahydro-1H-

pyrazino[1,2-a]quinoline-4,6-diones

AUTHOR (S): Bernotas, Ronald C.

CORPORATE SOURCE: Aventis Pharmaceuticals, Bridgewater, NJ, 08807, USA

SOURCE: Synlett (2004), (12), 2165-2166 CODEN: SYNLES; ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 142:38216

An expeditious route to constrained arylpiperazinones has been developed.

The key reaction formed the tricyclic system in one-pot via a

1,4-addition-lactamization-aromatic substitution sequence. Four examples were

prepared

REFERENCE COUNT: THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS 10

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 9 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:703120 HCAPLUS

DOCUMENT NUMBER: 141:207232

TITLE: Preparation of heterocyclyl-3-sulfonylindazoles as

5-hydroxytryptamine-6 ligands

INVENTOR(S): Bernotas, Ronald Charles; Yan, Yinfa;

Robichaud, Albert Jean; Liu, Guangcheng

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

U.S. Pat. Appl. Publ., 31 pp. SOURCE:

CODEN: USXXCO DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.				KIND DATE				APPLICATION NO.						DATE		
						-									-		
US	2004	1671	22		A1		2004	0826	1	US 2	004-	7784	27		2	0040	213
WO	2004	0742	43		A2		2004	0902	1	WO 2	004-1	US39:	26		2	0040	210
WO	2004	0742	43		A3		2004	1202									
	W:	ΑE,	ΑE,	AG,	AL,	AL,	AM,	AM,	AM,	AT,	ΑT,	AU,	ΑZ,	ΑZ,	BA,	BB,	BG,
		BG,	BR,	BR,	BW,	BY,	BY,	ΒZ,	BZ,	CA,	CH,	CN,	CN,	CO,	CO,	CR,	CR,
							DE,										
		ES,	FI,	FI,	GB,	GD,	GE,	GE,	GH,	GM,	HR,	HR,	HU,	HU,	ID,	IL,	IN,
		IS,	JP,	JP,	ΚE,	KE,	KG,	KG,	ΚP,	KP,	KP,	KR,	KR,	KZ,	KZ,	KZ,	LC,
		LK,	LR,	LS,	LS,	LT,	LU,	LV,	MA,	MD,	MD,	MG,	MK,	MN,	MW,	MX,	MX,
		MZ,	MZ,	NA,	NI												
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AT,	ΒE,
		BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,
		MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,
		GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG								-
PRIORITY APPLN. INFO.:						US 2003-447613P						1	P 20030214				
OTHER SOURCE(S):																	

GI

$$(R^5)$$
 p (CR^6R^7) n (R^5) p (CR^6R^7) n (R^1) m (R^3) N (R^3) I

AB The title compds. (I) [A = C, CR8, N; R1 = H, halogen, cyano, COR9, OCO2R10, CO2R11, CONR12R13, SOxR14, NR15R16, OR17, each (un) substituted C1-6 alkyl, C3-7 cycloalkyl, aryl, or heteroaryl; R2 = (un)substituted C1-6 alkyl, C3-7 cycloalkyl, aryl, heteroaryl group, (un)substituted 8- to 13-membered bicyclic or tricyclic ring having a N atom at the bridgehead and optionally containing 1, 2 or 3 addnl. heteroatoms selected from N, O or S; R3 = H, each (un) substituted C1-6 alkyl, C3-7 cycloalkyl, aryl, or heteroaryl; R4 = H, each (un) substituted C1-6 alkyl or C3-7 cycloalkyl; R5-R7 = H, each (un) substituted C1-6 alkyl or C3-7 cycloalkyl; m, p = aninteger of 1-3; n = 1,2; R8 = H, OH, (un) substituted C1-6 alkoxy; R9, R10, R11, R17 = H, each (un) substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-6 cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl; R12, R13, R15, R16 = H or (un)substituted C1-4 alkyl or NR12R13 or NR15R16 together forms a 5- to 7-membered ring optionally containing another heteroatom selected from O, (un)substituted NH or SOx; R14 = each (un)substituted C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl, C3-6 cycloalkyl, cycloheteroalkyl, aryl, or heteroaryl; x = 0, 1, 2; the solid line with a dotted line represents a single bond or a double bond] or stereoisomers thereof or pharmaceutically acceptable salts thereof are prepared These compds. are modulators 5-HT6 receptor and useful in the therapeutic treatment of disorders related to or affected by the 5-HT6 receptor including motor disorder, anxiety disorder, cognitive disorder, neurodegenerative disorder, attention deficit disorder, obsessive compulsive disorder, withdrawal from drug, alc. or nicotine addiction, schizophrenia, depression, and Alzheimer's disease, stroke, head trauma, and neuropathic pain. For example, 5-(4-benzylpiperazin-1-yl)-1-(4-fluorophenyl)-3-phenylsulfonyl-1H-indazole hydrochloride at 1 μ M inhibited by 74% the binding of [3H]-LSD to human cloned 5-HT6 receptor.

L25 ANSWER 10 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:701785 HCAPLUS

DOCUMENT NUMBER: 141:200209

TITLE: Heterocyclyl-3-sulfonylazaindole or-azaindazole

> derivatives as 5-HT6 receptor ligands, and their use for the treatment of central nervous system disorders

Bernotas, Ronald Charles; Yan, Yinfa

INVENTOR(S): PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

U.S. Pat. Appl. Publ., 18 pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

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PATENT NO.
                        KIND
                               DATE
                                          APPLICATION NO.
                                                                  DATE
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                                                                  -----
     US 2004167030 A1
                               20040826 US 2004-778441
                                                                  20040213
                         A1
                              20040902 WO 2004-US3930
     WO 2004074286
                                                                  20040210
         W: AE, AE, AG, AL, AL, AM, AM, AM, AT, AT, AU, AZ, AZ, BA, BB, BG,
             BG, BR, BR, BW, BY, BY, BZ, BZ, CA, CH, CN, CN, CO, CO, CR, CR,
             CU, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EC, EE, EE, EG, ES,
             ES, FI, FI, GB, GD, GE, GE, GH, GM, HR, HR, HU, HU, ID, IL, IN,
             IS, JP, JP, KE, KE, KG, KG, KP, KP, KP, KR, KR, KZ, KZ, KZ, LC,
             LK, LR, LS, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MX,
             MZ, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                           US 2003-447515P
                                                               P 20030214
OTHER SOURCE(S):
                        MARPAT 141:200209
     The invention provides the title compds. and their use for the treatment
     of a central nervous system disorder related to or affected by the 5-HT6
     receptor. Preparation of e.g.
5-(4-methylpiperazin-1-yl)-3-(phenylsulfonyl)-1H-
     pyrazolo[4,3-b]pyridine hydrochloride is described.
L25 ANSWER 11 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2004:574514 HCAPLUS
DOCUMENT NUMBER:
                        141:260330
TITLE:
                        Chloromethyl sulfones from sulfonyl chlorides via a
                        one-pot procedure
                        Antane, Schuyler; Bernotas, Ronald; Li,
AUTHOR (S):
                        Yanfang; McDevitt, Robert; Yan, Yinfa
CORPORATE SOURCE:
                        Wyeth Research, Chemical and Screening Sciences,
                        Princeton, NJ, 08543-8000, USA
SOURCE:
                        Synthetic Communications (2004), 34(13), 2443-2449
                        CODEN: SYNCAV; ISSN: 0039-7911
                        Marcel Dekker, Inc.
PUBLISHER:
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        English
OTHER SOURCE(S):
                        CASREACT 141:260330
     A simplified one-pot transformation of a diverse set of aryl- and
     heteroaryl-sulfonyl chlorides into the corresponding chloromethyl sulfones
     is described.
REFERENCE COUNT:
                        21
                              THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
                              RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L25 ANSWER 12 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:
                        2004:80697 HCAPLUS
DOCUMENT NUMBER:
                        140:146118
TITLE:
                        Preparation of heterocyclylalkyl-sulfonylazaindole or
                        -azaindazole derivatives 5-hydroxytryptamine-6 (5-HT6)
                        ligands
INVENTOR(S):
                        Bernotas, Ronald Charles; Lenicek, Steven
                        Edward; Elokdah, Hassan Mahmoud; Li, David Zenan
PATENT ASSIGNEE(S):
                        Wyeth, John, and Brother Ltd., USA
SOURCE:
                        PCT Int. Appl., 50 pp.
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
                        1
PATENT INFORMATION:
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PATENT		KIN	D	DATE		APPLICATION NO.						DATE			
WO 2004	009600		A1	-	2004	0129	1	 WO 2	003-	 US22:	506		2	 0030	 717
W:	AE, AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CO, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM, HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
	LS, LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	ΝZ,	OM,
	PG, PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,
	TR, TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
· RW:	GH, GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	ΰĠ,	ZM,	ZW,	AM,	ΑZ,	BY,
	KG, KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
	FI, FR,	GB,	GR,	HU,	ΙE,	ΙT,	LŲ,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,
	BF, BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG
CA 2491	251		AA		2004	0129	(CA 2	003-	2491	251		2	0030	717
US 2004	023970		A1		2004	0205	1	US 2	003-	6214	32		2	0030	717
PRIORITY APP	LN. INFO	.:					1	US 2	002-	3969	49P		P 2	0020	718
							1	WO 2	003-1	US22!	506	1	W 2	0030	717
OTHER SOURCE	(S):		MARI	TAG	140:	1461	18								

GI

AΒ Title compds. I [W, X, Y, Z, Q = N, substituted C; R1 = (cyclo)alkyl, (hetero)aryl, etc.; R2 = H, halo, alkyl, alkoxy, etc.; R3-4 = H, alkyl; R5 = H, alk(en/yn)yl, etc.; R6 = alk(en/yn)yl, cycloalkyl, etc.; R7-8 = H, alk(en/yn)yl, cycloalkyl, etc.; m, n = 0-3; p = 0-2] are prepared For instance, 3-(Phenylsulfonyl)-1H-pyrrolo[2,3-b]pyridine (preparation given) is reacted with tert-Bu (2R)-2-[[[(4-methylphenyl)sulfonyl]oxy]methyl]-1pyrrolidinecarboxylate (i. DMF, NaH, 0°; ii. dioxane, HCl, 4 h) to give II-HCl. II has Ki = 12 nM for the 5-HT6 receptor. I are useful for treatment of a central nervous system disorder related to or affected by the 5-HT6 receptor.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 13 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

3

ACCESSION NUMBER:

2004:80650 HCAPLUS

DOCUMENT NUMBER:

140:146005

TITLE:

Preparation of 1-heterocyclylalkyl-3-sulfonylindoles

and indazoles as 5-HT6 ligands

INVENTOR(S):

Bernotas, Ronald Charles; Lenicek, Steven

Edward

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 46 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIN	D	DATE		APPLICATION NO.						DATE			
	WO	2004	 0095	 48		A1	-	2004	0129	1	 WO 2	003-	 US22	 485		2	0030	 717	
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
			PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,	TN,	
			TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW				
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
			KG,	ΚZ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
			FI,	FR,	GB,	GR,	HU,	ΙE,	ΙT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
	CA	2491	248			AA		2004	0129		CA 2	003-	2491:	248		2	0030	717	
	US	2004	0240	23		A1		2004	0205	1	US 2	003-	6216	98		2	0030	717	
PRIO	PRIORITY APPLN. INFO.:							US 2002-396958P					P 20020718						
										Ī	WO 2	003-1	U\$224	485	1	W 2	0030	717	
			\						_										

OTHER SOURCE(S):

MARPAT 140:146005

GI

$$R_{m}$$
 $(CR^{3}R^{4})_{n}$
 $(CR^{7}R^{8})_{q}$

AB Title compds. [I; W = N, CR2; R = halo, cyano, OCO2R9, CO2R10, CONR11R12, SOxR13, NR14R15, OR16, COR17, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heteroaryl; R1 = (substituted) alkyl, cycloalkyl, aryl, heteroaryl, etc.; R2 = H, halo, (substituted) alkyl, alkoxy, cycloalkyl, aryl, heteroaryl; R3, R4 = H, (substituted) alkyl; R5 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R6 = (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; R7, R8 = H, (substituted) alkyl, cycloalkyl, alkenyl, alkynyl; m, n, p = 0-3; q, x =0-2; R9, R10, R13, R17 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R11, R12, R14, R15 = H, (substituted) alkyl; NR11R12, NR14R15 = 5-7 membered ring; R16 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl; R18 = H, (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, cycloheteroalkyl, aryl, heteroaryl], were prepared Thus, 3-(phenylsulfonyl)-1H-indole (preparation given) in DMF at 0° was treated with sodium hydride in mineral oil stirred for 2 h at ambient temperature, treated with

4-(toluene-4-sulfonyloxymethyl)piperidine-1-carboxylic acid tert-Bu ester and the mixture was stirred for 16 h at 55° to

give tert-Bu 4-[3-(phenylsulfonyl)-1H-indol-1-ylmethyl]piperidine-1-carboxylate. The latter was stirred with 4N HCl in dioxane to give 82% 3-(phenylsulfonyl)-1-(piperidin-4-ylmethyl)-1H-indole hydrochloride, which showed 5-HT6 binding with Ki = 27 nM.

L25 ANSWER 14 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:972076 HCAPLUS

DOCUMENT NUMBER: 140:27761

TITLE: 1-(Aminoalkyl)-3-sulfonylazaindoles as

5-hydroxytryptamine-6 ligands

INVENTOR(S): Bernotas, Ronald Charles; Lenicek, Steven

Edward; Antane, Schuyler A.

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 63 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.						D	DATE		APPLICATION NO.						DATE			
		-					-									-			
	WO	2003	1019	90		A1		2003	1211		WO :	2003-	US17	466		2	0030	603	
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB	, BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC	, EE,	ES,	FI,	GB,	GD,	GE,	GH,	
			GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JΡ,	KE	, KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,	
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN	, MW,	MX,	MZ,	NI,	NO,	NZ,	OM,	
			PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG	, SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	
			TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	ΥU,	ZA	, ZM,	ZW					•	
		RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ	, TZ,	ŪĠ,	ZM,	ZW,	AM,	AZ,	BY,	
			KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG	, CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
			FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC	, NL,	PT,	RO,	SE,	SI,	SK,	TR,	
			BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ	, GW,	ML,	MR,	NE,	SN,	TD,	TG	
	US	2003										2003-							
	US	6825	212			B2		2004	1130										
	BR	2003	0115	91		Α		2005	0301		BR 2	2003-	1159	1		2	0030	603	
	ΕP	1509	522			A1		2005	0302		EP 2	2003-	7343	66		2	0030	603	
		R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	,. IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, TR,	BG,	CZ,	EE,	HU,	SK		
	US	2005	0854	31		A1		2005	0421		US 2	2004-	9631	32		2	0041	012	
PRIOR	(TI	APP	LN.	INFO	. :						US 2	2002-	3855	02P		P 2	0020	604	
												2003-							
											WO 2	2003-	US17	466		W 2	0030	603	
	ס מר	יודסמדי	101.			MADI	יייית	140.	2776	1									

OTHER SOURCE(S):

MARPAT 140:27761

GI

$$X = \begin{bmatrix} & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & &$$

AB The present invention provides title compds. I (W, X, Y, Z = N or substituted C; n = 2-5; R1 = C1-C6 alkyl, C3-C7 cycloalkyl, aryl etc.; R2 = H, halogen, or a C1-C6 alkyl, C1-C6 alkoxy etc.; R3, R4 = H or C1-C6

alkyl group; R5, R6 = H or C1-C6 alkyl group, C2-C6 alkenyl etc.), and the use thereof for the therapeutic treatment of disorders relating to or affected by the 5-HT6 receptor. Thus, title compound I (R1 = 1-naphthyl; R2 = H; Z = N; X, Y, W = C; CR3R4 = CH2CH2; R5 = R6 = Me) was prepared (mp 203-206°) and demonstrated binding to the 5-hydroxytryptamine-6 receptor with Ki value 1 nM compared to 6.0 nM for clozapine.

REFERENCE COUNT: THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 15 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

2003:972055 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 140:27760

TITLE: 1-(Aminoalkyl)-3-sulfonylindole and -indazole

derivatives as 5-hydroxytryptamine-6 ligands

INVENTOR (S): Bernotas, Ronald Charles; Lenicek, Steven

Edward; Antane, Schuyler A.; Zhou, Ping; Li, Yanfang

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO.				KIN		DATE		APPLICATION NO.									
WO	2003	1019	62												2	00306	503	
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
							DK,											
							IN,											
							MD,											
							SC,										-	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
	RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
		KG,	ΚZ,	MD,	RU,	TJ.,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	
		FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	RO,	SE,	SI,	SK,	TR,	
							CM,											
US	2003	23282	28		A1		2003	1218	1	US 2	003-4	15300	9		20	00306	503	
US	6727	246			B2		20040	0427										
EP	1509	501			A1		20050	0302	1	EP 2	003-1	73683	18		20	00306	503	
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
							RO,											
BR	2003	01143	36		A		20050	322	1	BR 2	003-3	L1436	5		20	00306	503	
PRIORITY	APP	LN. :	INFO	. :					1	US 2	002-3	8569	95P	I	2 (0206	504	
									1	WO 2	003-t	JS174	172	V	V 20	00306	503	
OTHER SO	OTHER SOURCE(S):					MARPAT 140:2776												

AΒ The present invention relates to the preparation of aminoalkyl indole and

indazole I (W = N or substituted C; m = 1-3; n = 2-5; R = H, halogen, CN, C1-C6alkyl, C2-C6 alkenyl etc.; R1 = C1-C6 alkyl, C3-C7 cycloalkyl, aryl etc.; R2 = H, halogen, or a C1-C6 alkyl, C1-C6 alkoxy etc.; R3, R4 = H or C1-C6 alkyl group; R5, R6 = H or C1-C6 alkyl group, C2-C6 alkenyl etc.), and the use thereof for the treatment of central nervous system disorders related to or affected by the 5-HT6 receptor. Thus, (Rm = H, R1 = 1-naphthyl, R2 = H, n = 2, R5 = R6 = CH3) (mp 239-241°) prepared by reacting corresponding indole derivative with N,N-dimethyl-2-chloroethylamine showed 5-HT6 binding Ki of 4 nM compared to 6.0 nM for clozapine.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 16 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:634752 HCAPLUS

TITLE: Novel, potent 5HT2A antagonists

AUTHOR(S):

Harris, Keith J.; Palermo, Mark; Knight, Julie;
Shimshock, Steven; Bordeau, Kenneth J.; Fink, David
M.; Kosley, Raymond; Wolf, Veronica; Chiang, Yulin;

Lee, George; Rauckman, Barbara S.; Bernotas, Ronald; Sing, Lily; Hitchcock, Janice; Sorensen, Stephen; Kongsamut, Sam; Roehr, Joachim E.; Senyah,

Yaw; Kominos, Dorothea

CORPORATE SOURCE: Chemistry, Aventis, Bridgewater, NJ, 07039, USA

SOURCE: Abstracts of Papers, 226th ACS National Meeting, New York, NY, United States, September 7-11, 2003 (2003),

MEDI-144. American Chemical Society: Washington, D.

CODEN: 69EKY9

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB The synthesis and biol. evaluation of novel, potent 5HT2A antagonists will be described. These 1-heterocyclic-3-substituted piperazine compds. (1) exhibit potent 5HT2A binding in vitro. Several compds. were tested for in vivo 5HT2A antagonism (DMT mouse head twitch). Compound (2) below possessed oral activity in the DMT head twitch model.

L25 ANSWER 17 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:511332 HCAPLUS

DOCUMENT NUMBER: 139:85327

TITLE: Preparation of azaindolylalkylamines as

5-hydroxytryptamine-6 ligands

INVENTOR(S): Bernotas, Ronald Charles; Cole, Derek Cecil;

Lennox, William Joseph

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 96 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT	NO.		KIND DATE					APPL	ICAT		DATE					
			-			-				-		 -			-		
WO	2003	0539	70		A 1		2003	0703	1	WO 2	002-1	US40:	220		20021217		
	W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
		GM,	HR,	ΗU,	ID,	IL,	IN,	ıs,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,
		ŪĠ,	UZ,	VN,	YU,	ZA,	ZM,	ZW									

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG EP 1456206 EP 2002-795890 A1 20040915 20021217 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK BR 2002015151 BR 2002-15151 20041019 20021217 Α US 2003171395 **A1** US 2002-323263 20030911 20021219 US 6800640 B2 20041005 US 2005020598 .A1 20050127 US 2004-922678 20040819 US 2001-342838P P 20011220 PRIORITY APPLN. INFO.: WO 2002-US40220 W 20021217 US 2002-323263 A1 20021219 OTHER SOURCE(S): MARPAT 139:85327

GT

The title compds. [I; W = SO2, CO, CONR11, CSNR12; X = N, CR1; Y = N, CR2; Z = N, CR3; Q = N, CR4, with the proviso that no more than two of X, Y, Z and Q may be N; n = 2-3; R1-R4 = H, halo, CN, etc.; R5, R6 = H, alkyl, cycloalkyl, etc.; R7, R8 = H, (un)substituted alkyl; R9 = H, halo, alkyl, etc.; R10 = (un)substituted alkyl, aryl, heteroaryl, etc.; R11, R12 = H, (un)substituted alkyl, aryl, heteroaryl], useful for the therapeutic treatment of disorders relating to or affected by the 5-HT6 receptor, were prepared E.g., a multi-step synthesis of I [X = N; Y, Z, Q = CH; W = SO2; R5-R9 = H; R10 = 2-ClC6H4; n = 2], starting with 2-chloro-3-nitropyridine and tert-Bu cyanoacetate, which showed Ki of 5.0 nM against 5-HT6 binding, was given.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 18 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:450102 HCAPLUS

TITLE:

Parallel solution phase synthesis of N-arylsulfonyl

indoles, -indazoles, and -azaindoles as

5-hydroxytryptamine-6-ligands

AUTHOR(S):

Cole, Derek C.; Lennox, William J.; Stock, Joseph R.;

Zhou, Ping; Ellingboe, John; Bernotas, Ronald C.; Smith, Deborah L.; Schechte, Lee E.; Zhang,

Guoming

CORPORATE SOURCE:

Wyeth Research, Pearl River, NY, USA

SOURCE:

Abstracts, 31st Northeast Regional Meeting of the American Chemical Society, Saratoga Springs, NY, United States, June 15-18 (2003), 173. American

Chemical Society: Washington, D. C.

CODEN: 69EBFV

DOCUMENT TYPE:

Conference; Meeting Abstract

LANGUAGE: English

AB 5-Hydroxytryptamine-6 (5-HT6) has been cloned from rat cDNA based on its homol. to G-protein-coupled receptors. Rat and human 5-HT6 mRNA is found in the striatum, amygdala, nucleus accumbens, hippocampus, cortex and olfactory tubercle, but not found in the peripheral organs. Pharmacol. studies indicate that a variety of antipsychotic agents have high affinity for the 5-HT6 receptor suggesting a potential therapeutic target for the treatment of psychiatric diseases. Behavioral studies have implicated a role for 5-HT6 in cognition enhancement. We have investigated series of N-arylsulfonyl indoles, -indazoles, and -azaindoles as 5-HT6 ligands. The parallel library synthesis and biol. evaluation of these classes of compds. will be presented.

L25 ANSWER 19 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:790226 HCAPLUS

DOCUMENT NUMBER: 137:310813

TITLE: Preparation of sulfuric acid mono-[3[[1-[2-(4-

fluorophenyl)ethyl]-piperidin-4-yl]hydroxymethyl]-2-

methoxyphenyl]ester and enantiomers as 5HT2A

antagonists.

INVENTOR(S): Bernotas, Ronald Charles; Brown, Paul Wayne;

Emmons, Gary Thomas; King, Chi-hsin Richard

PATENT ASSIGNEE(S): Aventis Pharmaceuticals Inc., USA

SOURCE: U.S., 19 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6465490	B1	20021015	US 2000-615246	20000713
US 2003087932	A1	20030508	US 2002-200821	20020722
US 6716986	B2	20040406		
US 2004152900	A1	20040805	US 2004-760515	20040120
PRIORITY APPLN. INFO.:		•	US 1999-198215P F	19990716
			US 2000-615246 A	3 20000713
			US 2002-200821 A	3 20020722

OTHER SOURCE(S): CASREACT 137:310813

GT

AB Title compds. I were prepared Thus, acetic acid [1-[2-(4-fluorophenyl)ethyl]piperidin-4-yl](3-hydroxy-2-methoxyphenyl)methyl ester (preparation given) was heated at 45° with SO3.pyridine in MeCN for 18

h; H2O, MeOH, and K2CO3 were added followed by 12 h reflux to give sulfuric acid mono-(+)-[3[[1-[2-(4-fluorophenyl)ethyl]piperidin-4-yl]hydroxymethyl]-2-methoxyphenyl] ester. Title compds. were shown to penetrate the blood-brain barrier.

REFERENCE COUNT:

28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 20 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:63973 HCAPLUS

DOCUMENT NUMBER:

134:115860

TITLE:

Preparation of sulfuric acid mono- $[3-(\{1-[2-(4-fluoro-phenyl)-ethyl]-piperidin-4-yl\}-hydroxy-methyl)-2-methoxy-phenyl]ester and analogs for use as serotonin$

5HT2A receptor antagonists

INVENTOR (S):

Bernotas, Ronald; Brown, Paul; Emmons, Gary;

King, Chi-Hsin

PATENT ASSIGNEE(S):

Aventis Pharmaceuticals Inc., USA

SOURCE: PCT Int. Appl., 54 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 2001005764 WO 2001005764		WO 2000-US19065	20000713
CR, CU, CZ, HU, ID, IL, LU, LV, MA, SD, SE, SG, YU, ZA, ZW, RW: GH, GM, KE,	DE, DK, DM, DZ, IN, IS, JP, KE, MD, MG, MK, MN, SI, SK, SL, TJ, AM, AZ, BY, KG, LS, MW, MZ, SD,	BA, BB, BG, BR, BY, EE, ES, FI, GB, GD, KG, KP, KR, KZ, LC, MW, MX, MZ, NO, NZ, TM, TR, TT, TZ, UA, KZ, MD, RU, TJ, TM SL, SZ, TZ, UG, ZW,	GE, GH, GM, HR, LK, LR, LS, LT, PL, PT, RO, RU, UG, US, UZ, VN, AT, BE, CH, CY,
		IE, IT, LU, MC, NL, ML, MR, NE, SN, TD,	
CA 2374635	AA 20010125	CA 2000-2374635	20000713
BR 2000012477	A 20020402	BR 2000-12477	20000713
		EP 2000-947304	
IE, SI, LT, JP 2003505374 AU 769484 NZ 516286 ZA 2002000101	LV, FI, RO, MK, T2 20030212 B2 20040129 A 20040326 A 20030404	GB, GR, IT, LI, LU, CY, AL JP 2001-511425 AU 2000-60939 NZ 2000-516286 ZA 2002-101 NO 2002-213	20000713 20000713 20000713 20020104
PRIORITY APPLN. INFO.:		US 1999-354704 WO 2000-US19065	A2 19990716
OTHER SOURCE(S): GI	MARPAT 134:1158	50	

$$\begin{array}{c|c} \text{OMe} & & \\ \\ \text{Rlo} & & \\ \hline & & \\ & &$$

AΒ Preparation of the title compound I and its analogs II (R1 = H, trialkylsilane, alkylcarboxy; R2 = (un)substituted arylalkyl, COOR3, H; R3 = alkyl, aryl or arylalkyl; X = CO or CHOR4; R4 = H or alkylcarboxy) is disclosed. Thus, compound I was prepared by combined sulfonation/deacetylation of acetic acid {1-[2-(4-fluorophenyl)-ethyl]-piperidin-4-yl}-(3-hydroxy-2methoxyphenyl) methyl ester. I is an active metabolite of II (R1 = Me; X = CHOH; R2 = 4-FC6H4CH2CH2) and a method for its preparation and isolation via metabolism is claimed. The title compds. are claimed as serotonin 5HT2A receptor antagonists and as such are useful for the treatment of a number of disease states, e.g. schizophrenia, anxiety, variant angina, anorexia nervosa, cardiac arrhythmias, etc.

HCAPLUS COPYRIGHT 2005 ACS on STN L25 ANSWER 21 OF 52

ACCESSION NUMBER: 1999:300316 HCAPLUS

DOCUMENT NUMBER: 131:19267

TITLE: [3+2] cycloaddition reactions of proline benzyl ester

nitrone with alkenes and alkynes

AUTHOR (S): Bernotas, Ronald C.; Sabol, Jeffrey S.;

Sing, Lily; Friedrich, Dirk

CORPORATE SOURCE: Hoechst Marion Roussel, Inc., Bridgewater, NJ, 08807,

SOURCE: Synlett (1999), (5), 653-655

CODEN: SYNLES: ISSN: 0936-5214

PUBLISHER: Georg Thieme Verlag

DOCUMENT TYPE: Journal.

LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:19267

1,2-Didehydroproline benzyl ester N-oxide was synthesized. underwent [3+2] cycloaddns. with a variety of alkenes and alkynes to give isoxazolidines and isoxazolines, resp., with good to excellent regio- and diastereoselectivity.

THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 22 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:86846 HCAPLUS

DOCUMENT NUMBER:

TITLE: Evidence for a novel pentyl radical adduct of the

cyclic nitrone spin trap MDL 101,002

AUTHOR(S): Dage, Jeffrey L.; Ackermann, Bradley L.; Barbuch,

Robert J.; Bernotas, Ronald C.; Ohlweiler, David F.; Haegele, Klaus D.; Thomas, Craig E.

CORPORATE SOURCE: Hoechst Marion Roussel, Inc., Cincinnati, OH, USA

SOURCE: Free Radical Biology & Medicine (1997), 22(5), 807-812

CODEN: FRBMEH; ISSN: 0891-5849

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

3,4-Dihydro-3,3-dimethyl-isoquinoline-2-oxide (MDL 101,002) is a conformationally constrained cyclic analog of the known spin trap lpha-Ph N-tert-Bu nitrone (PBN). Because of PBN's ability to scavenge free radicals, MDL 101,002 is currently being evaluated in stroke models as a means to ameliorate the oxidative insult associated with reperfusion injury. To augment our understanding of the radical scavenging mechanism of this potential drug, MDL 101,002 was incubated with soybean lipoxygenase in the presence of linoleic acid to study the interaction between MDL 101,002 and free radicals formed during lipid peroxidn. Anal. of the reaction mixture was performed by high performance liquid chromatog. using normal phase conditions with detection by atmospheric pressure chemical ionization mass spectrometry (APCI-MS). Similar to the work by Iwahashi et al. [Arch. Biochem. Biophys., 1991, 285, 172], who studied the spin trap α -(4-pyridyl-1-oxide)-N-tert-Bu nitrone (4-POBN), an adduct that suggested the trapping of pentyl radicals by MDL 101,002 was observed However, the apparent mol. ion for this adduct (246 Da) was 1 Da lower than would be predicted if a pentyl radical had simply added to MDL 101,002. In addition, the adduct exhibited significant absorbance at 304 nm, consistent with the unsatd. nitrone structure of MDL 101,002. To account for these observations, it is postulated that, after the initial capture of a pentyl radical, subsequent abstraction of a hydrogen atom by a neighboring radical occurs to regenerate a nitrone (1-pentyl analog of MDL 101,002). We present evidence for this adduct and offer a mechanism for its formation. These findings indicate that mass spectroscopic anal. of stable nitrone radical adducts may be useful in the identification of radical-dependent damage in vivo and possibly in clin. development of MDL 101,002 as an antioxidant pharmaceutical.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 23 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:632485 HCAPLUS

DOCUMENT NUMBER: 125:328663

TITLE: 2,3,4,4a,5,6-Hexahydro-1H-pyrazino[1,2-a]quinoline

synthesis via a [3+2] cycloaddition

AUTHOR(S): Bernotas, Ronald C.; Adams, Ginette

CORPORATE SOURCE: Hoechst Marion Roussel, Inc., Cincinnati, OH, 45215,

USA

SOURCE: Tetrahedron Letters (1996), 37(41), 7343-7344

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:328663

AB A constrained aryl piperazine, 2,3,4,4a,5,6-hexahydro-1H-pyrazino[1,2-a]quinoline, has been synthesized using an intramol. aromatic substitution as the key step.

L25 ANSWER 24 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1996:632484 HCAPLUS

DOCUMENT NUMBER: 125:328662

TITLE: Synthesis of a 1-benzylpiperazin-2-one nitrone and its

reaction with alkynes and alkenes

AUTHOR(S): Bernotas, Ronald C.; Adams, Ginette

CORPORATE SOURCE: Hoechst Marion Roussel, Inc., Cincinnati, OH, 45215,

USA

SOURCE: Tetrahedron Letters (1996), 37(41), 7339-7342

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

OTHER SOURCE(S): CASREACT 125:328662

AB 1-Benzylpiperazin-2-one nitrone (I) was prepared in 3 steps from 4-(tert-butoxycarbonyl)piperazin-2-one. I readily undergoes [3+2] cycloaddns. with alkynes and alkenes to give Δ4-isoxazolines and

isoxazolidines, resp., which can be reductively opened to 3-substituted

piperazin-2-ones and 1,3-amino alcs.

L25 ANSWER 25 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:525627 HCAPLUS

DOCUMENT NUMBER: 125:247579

TITLE: Thermal cleavage of oxazolidine-4,5-diones to imines:

a short synthesis of 3,4-dihydro-3,3-dimethyl-7-

trifluoromethylisoquinoline 2-oxide

AUTHOR(S): Bernotas, Ronald C.; Adams, Ginette;

Nieduzak, Thaddeus R.

CORPORATE SOURCE: Hoechst Marion Roussel, Cincinnati, OH, 45215, USA

SOURCE: Synthetic Communications (1996), 26(18), 3471-3477

CODEN: SYNCAV; ISSN: 0039-7911

PUBLISHER: Dekker
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of oxazolidine-4,5-diones was thermally cleaved to cyclic imines in excellent yield. This reaction was utilized in an efficient synthesis

of 3,4-dihydroisoquinoline-based nitrone.

L25 ANSWER 26 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:389705 HCAPLUS

DOCUMENT NUMBER: 125:104874

TITLE: In vitro and in vivo activity of a novel series of

radical trapping agents in model systems of CNS

oxidative damage

AUTHOR(S): Thomas, Craig E.; Carney, John M.; Bernotas,

Ronald C.; Hay, David A.; Carr, Albert A.

CORPORATE SOURCE: Marion Merrell Dow Research Institute, Cincinnati, OH,

45215-6300, USA

SOURCE: Annals of the New York Academy of Sciences (1994),

738 (Neurobiology of NO• and •OH), 243-249

CODEN: ANYAA9; ISSN: 0077-8923

PUBLISHER: New York Academy of Sciences

DOCUMENT TYPE: Journal LANGUAGE: English

AB Many laboratory and clin. studies have suggested that oxygen radical formation and resultant cell damage contribute to CNS injury following stroke and neurotrauma. Therefore, antioxidants represent a viable therapeutic

approach for management of CNS oxidative damage. The spin trap α -phenyl-tert-Bu nitrone (PBN) has recently been shown to protect

against stroke-induce damage and reduce aging-associated neurol. deficits. A cyclic analog of PBN, MDL 101,002, was prepared and tested in a number of in

vitro and in vivo assays designed to assess its neuroprotective

properties. MDL 101,002 was found to be an effective ●OH trap, to inhibit lipid peroxidn., and to decrease infarct size in a gerbil model of stroke. These results further indicate that oxidative damage arising from stroke contributes to infarct formation, and that spin traps are effective in ameliorating ischemia and reperfusion-induced CNS injury.

L25 ANSWER 27 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:344478 HCAPLUS

DOCUMENT NUMBER:

125:114441

TITLE:

SOURCE:

Synthesis and radical scavenging activity of 3,3-dialkyl-3,4-dihydroisoquinoline 2-oxides

AUTHOR (S):

Bernotas, Ronald C.; Thomas, Craig E.; Carr,

Albert A.; Nieduzak, Thaddeus R.; Adams, Ginette;

Ohlweiler, David F.; Hay, David A.

CORPORATE SOURCE:

Hoechst Marion Roussel, Cincinnati, OH, 45215, USA Bioorganic & Medicinal Chemistry Letters (1996),

6(10), 1105-1110

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: DOCUMENT TYPE: Elsevier Journal

LANGUAGE:

English

The synthesis and antioxidant activities of several cyclic nitrones related to Ph t-Bu nitrone (PBN) are described. These nitrones may act as radical scavengers and have potential uses in the treatment of stroke and septic shock.

L25 ANSWER 28 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:294182 HCAPLUS

DOCUMENT NUMBER:

125:58295

TITLE:

Synthesis of benzazepine-based nitrones as radical

traps

AUTHOR (S):

Bernotas, Ronald C.; Adams, Ginette; Carr,

Albert A.

CORPORATE SOURCE:

Hoechst Marion Roussel, Cincinnati, OH, 45215, USA

SOURCE:

Tetrahedron (1996), 52(19), 6519-6526 CODEN: TETRAB; ISSN: 0040-4020

PUBLISHER: DOCUMENT TYPE: Elsevier

Journal

LANGUAGE:

English

GI

$$X = \begin{bmatrix} 7 & Me \\ Me \\ N & O \end{bmatrix}$$

I

AB Benzazepine-based nitrones were synthesized utilizing a modified Bischler-Napieralski reaction as the key step. These compds. are cyclic analogs of the radical trap Ph tert-Bu nitrone. The target compds. were the 4.5-dihydro-3.3-dimethyl-3H-2-benzazepine 2-oxides I (X = H, 8-chloro, 7,9-dichloro).

L25 ANSWER 29 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:101994 HCAPLUS

DOCUMENT NUMBER:

124:219400

TITLE:

Characterization of the radical trapping activity of a

novel series of cyclic nitrone spin traps

AUTHOR(S): Thomas, Craig E.; Ohlweiler, David F.; Carr, Albert

A.; Nieduzak, Thaddeus R.; Hay, David A.; Adams,

Ginette; Vaz, Roy; BErnotas, Ronald C.

CORPORATE SOURCE: Hoechst Marion Roussel, Inc., Cincinnati, OH, 45215,

USA

Journal of Biological Chemistry (1996), 271(6), SOURCE:

3097-104

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

Biology

DOCUMENT TYPE: Journal LANGUAGE: English

 α -Phenyl-tert-Bu nitrone (PBN) is a nitrone spin trap, which has shown efficacy in animal models of oxidative stress, including stroke, aging, sepsis, and myocardial ischemia/reperfusion injury. We have prepared a series of novel cyclic variants of PBN and evaluated them for radical trapping activity in vitro. Specifically, their ability to inhibit iron-induced lipid peroxidn. in liposomes was assessed, as well as superoxide anion (02) and hydroxyl radical (.OH) trapping activity as determined biochem. and using ESR (ESR) spectroscopy. All cyclic nitrones tested were much more potent as inhibitors of lipid peroxidn. than was The unsubstituted cyclic variant MDL 101,002 was approx. 8-fold more potent than PBN. An anal. of the analogs of MDL 101,002 revealed a direct correlation of activity with lipophilicity. However, lipophilicity does not solely account for the difference between MDL 101,002 and PBN, inasmuch as the calculated octanol/water partition coefficient for MDL 101,002 is

1.01 as compared to 1.23 for PBN. This indicated the cyclic nitrones are inherently more effective radical traps than PBN in a membrane system. The most active compound was a dichloro analog in the seven-membered ring series (MDL 104,342), which had an IC50 of 26 µM, which was 550-fold better than that of PBN. The cyclic nitrones were shown to trap .OH with MDL 101,002 being 20-25 times more active than PBN as assessed using 2-deoxyribose and p-nitrosodimethylaniline as substrates, resp. Trapping of .OH by MDL 101,002 was also examined by using ESR spectroscopy. Fenton's reagent was used, the .OH adduct of MDL 101,002 yielded a six-line spectrum with hyperfine coupling consts. distinct from that of Importantly, the half-life of the adduct was nearly 5 min, while that of PBN is less than 1 min at physiol. pH. MDL 101,002 also trapped the O2 radical to yield a six-line spectrum with coupling consts. very distinct from that of the .OH adduct. In mice, the cyclic nitrones ameliorated the damaging effects of oxidative stress induced by ferrous iron injection into brain tissue. Similar protection was not afforded by the lipid peroxidn. inhibitor U74006F, thus implicating radical trapping as a unique feature in the prevention of cell injury. Together, the in vivo activity, the stability of the nitroxide adducts, and the ability to distinguish between trapping of .OH and O2 suggest the cyclic nitrones to be ideal reagents for the study of oxidative cell injury.

L25 ANSWER 30 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:761964 HCAPLUS

DOCUMENT NUMBER: 123:286094

TITLE: 4-Piperazinylbenzo[b]thiophene derivatives as

serotonin receptor agents

INVENTOR(S): Bernotas, Ronald C.; Sprouse, Jeffrey S.;

Cheng, Hsien C.

Merrell Dow Pharmaceuticals Inc., USA PATENT ASSIGNEE(S):

SOURCE: U.S., 35 pp. Cont.-in-part of U.S. Ser. No. 79,692,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA:	TENT NO.				DATE	AP	PLICATION NO.		DATE	
us	5436246			Α	19950725	US	1993-119791		19930915	
WO	9406789			A1	19940331	WO	1993-US8865		19930917	
	W: AU	; CA,	FI,	HU, JP	, KR, NO,	NZ				
	RW: AT	, BE,	CH,	DE, DK	, ES, FR,	GB, G	R, IE, IT, LU,	MC, N	L, PT, SE	
EP	660832			A1	19950705	EP	1993-922253		19930917	
					19890114					
	R: AT	, BE,	CH,	DE, DK	, ES, FR,	GB, G	R, IE, IT, LI,	LU, M	C, NL, PT,	SE
JP	0850155	9		T2	19960220	JP	1994-508371		19930917	
JP	3298107			B2	20020702					
HU	72662			A2	19960528	HU	1995-796 1993-51321		19930917	
AU	671494			B2	19960829	AU	1993-51321		19930917	
					19940412					
AT	162190			E	19980115	AT	1993-922253		19930917	
ES	2112434			Т3	19980401	ES	1993-922253		19930917	
CA	2144947			С	20000201	CA	1993-2144947		19930917	
FI	9501249			Α	19950316	FI	1995-1249		19950316	
МО	9501015			Α	19950515	NO	1995-1015		19950316	
NO	310461			B1	20010709					
PRIORITY	APPLN.	INFO	. :			US	1992-947007	B1	19920917	
						US	1993-79692	В2	19930617	
							1993-119791		19930915	
							1993-US8865			
OMITTED OF	ATTO CT (C)			****						

OTHER SOURCE(S): MARPAT 123:286094

Ι

GI

AB A method is claimed for producing an agonist effect at the 5HT1A or 5HT1D receptor comprising administering title compound I in which Y is represented by hydrogen or C1-3 alkyl; R is represented by a substituent selected from the group consisting of hydrogen, C1-4 alkyl, C1-4 alkoxy, halogen, CF3, OCF3, and OH; R1 is represented by hydrogen, cycloalkyl, C1-6 alkyl, Ph optionally substituted, phenylalkyl, or phenylamidoalkyl; X is represented by hydrogen, (CH2)nX1, CH:CHX1 or CHX2(CH2)qCH3; n is an integer from 0-2; q is either the integer 0 or 1; X1 is represented by OH, OR2, NR2R3, CO2R2, CONR2R3, CN, or COR2; R2 and R3 are each independently represented by hydrogen, C1-4 alkyl, Ph optionally substituted, phenylalkyl, or R2 and

R3 together form a (CH2)m cycloalkyl, where m=2-6; X2 is OR4 or NR4R5 in which R4 and R5 are each independently hydrogen or C1-4 alkyl; and the pharmaceutically acceptable addition salts thereof; with the proviso that when n is 0 or X is CH:CHX1, then X1 is not OH, OR2, or NR2R3; to a patient in need thereof. Thus, e.g, treatment of Et 4-[4-(2-phenylethyl)-1-piperazinyl]benzo[b]thiophene-2-carboxylate (preparation given) with LiAlH4 afforded 4-[4-(2-phenylethyl)-1-piperazinyl]benzo[b]thiophene-2-methanol monohydrochloride which demonstrated IC50 =0.6(2) nM (5HT1A binding affinity) and IC50 =2.4(2) nM (5HT1D binding affinity).

L25 ANSWER 31 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:421209 HCAPLUS

DOCUMENT NUMBER: 123:228698

TITLE: Castanospermine analogs: their inhibition of

glycoprotein processing α -glucosidases from

porcine kidney and B16F10 cells

AUTHOR (S): Kang, Mohinder S.; Liu, Paul S.; Bernotas, Ronald

C.; Harry, Brenda S.; Sunkara, Prasad S.

CORPORATE SOURCE: Marion Merrell Dow Inc., Cincinnati, OH, 45215, USA

> Glycobiology (1995), 5(1), 147-52 CODEN: GLYCE3; ISSN: 0959-6658

PUBLISHER: Oxford University Press

DOCUMENT TYPE: Journal

LANGUAGE: English GT

HOL HO HO O₂CR Ι

SOURCE:

AB We have used a simple and efficient procedure for the synthesis of N-5-carboxypentyl-1-deoxynojirimycin, an affinity ligand for $\alpha\text{-glucosidase I}$ (Bernotas, R. C. and Ganem, B., Biochem. J., 270, 539-540, 1990). The affinity gel was used to purify lpha-glucosidase I in one step from crude extract In subsequent steps, partially purified α -glucosidase II was obtained. We have synthesized several castanospermine analogs, e.g. I [R = (CH2)nMe, Me2CHNH, cyclopropyl, 2-furyl, Ph, NHPh, Bn, n = 2-4, 6, 8, 14], of and studied their inhibition of α -glucosidase I in vitro using purified α -glucosidase I and in vivo in cultured B16F10 cells. Although the castanospermine analogs were significantly less active against the purified enzyme (IC50 .apprx.1-23 μ g/mL) as compared to castanospermine (IC50 = 0.02 $\mu g/mL$), several compds. had up to 30-fold higher activity than castanospermine against α -glucosidase I in B16F10 cells, based on the accumulation of G3M7-9N2 oligosaccharide-containing glycoproteins. results suggest that these analogs with lipophilic side chains cross the membrane barrier more efficiently than castanospermine. Once inside the cell, they may be converted to their active metabolite, castanospermine, by cellular esterases to give enzyme inhibition.

L25 ANSWER 32 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1995:266954 HCAPLUS

DOCUMENT NUMBER:

122:56053

TITLE:

4-(piperazinyl)benzothiophenes as serotonin receptor

agents

INVENTOR(S):

Bernotas, Ronald C.; Sprouse, Jeffrey S.;

Cheng, Hsien C.

PATENT ASSIGNEE(S):

Merrell Dow Pharmaceuticals Inc., USA

SOURCE:

PCT Int. Appl., 118 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	PATENT NO. K						APPLICATION NO.					DATE				
WO	9406789 W: AU,			A1					1993-	-US88	65		1	9930	917	
	RW: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R, IE,	IT,	LU,	MC,	NL,	PT,	SE	
US	5436246							US								
EP	660832			A1		1995	0705	EP	1993-	9222	53		1	9930	917	
EP	660832			B1		1989	0114									
	R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB, G	R, IE,	IT,	LI,	LU,	MC,	NL,	PT,	SE
JP	08501559)		Т2		1996	0220	JP	1994-	5083	71		1	9930	917	
JP	3298107			B2		2002	0702									
AU	671494			B2		1996	0829	AU	1993-	5132	1		1	9930	917	
UA	9351321			A1		1994	0412									
CA	2144947			С		2000	0201	CA	1993-	2144	947		1	9930	917	
NO	9501015			Α		1995	0515	NO	1995-	1015			1	99503	316	
NO	310461			B1		2001	0709									
PRIORIT	Y APPLN.	INFO	. :					US	1992-	9470	07		A 1	99209	917	
								US	1993-	7969	2		A 1	99300	617	
								US	1993-	1197	91		A 1	99309	915	
									1993-	US88	65		W 1	99309	917	
OMITTED OF	ATTD 4 - 1							_								

OTHER SOURCE(S):

MARPAT 122:56053

GI

The present invention discloses substituted 4-(piperazinyl)benzothiophenes AB I (R = H, alkyl, etc.; R1 = H, alkyl, cycloalkyl, etc.; X = H, alkyl, alkenyl, etc.; Y = H, alkyl) that are serotonin 5HT1A and 5HT1D receptor agonists. I are antidepressants or anxiolytics. An example compound, Et 4-[4-(phenylmethyl)-1-piperazinyl]benzo[b]thiophene-2-carboxylate (II) showed affinity toward 5-HT1A receptors (IC50 >1000 nM).

L25 ANSWER 33 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1994:409168 HCAPLUS

DOCUMENT NUMBER:

121:9168

TITLE:

Preparation of cyclic nitrones, and their use in

treating shock

INVENTOR(S):

Carr, Albert A.; Thomas, Craig E.; Bernotas,

Ronald C.; Ku, George

PATENT ASSIGNEE(S):

Merrell Dow Pharmaceuticals Inc., USA

SOURCE:

U.S., 20 pp. Cont.-in-part of U.S. Ser. No. 828,075,

abandoned. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

2

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5292746 ZA 9206781 CA 2077708 CA 2077708 AU 9222800	A	19940308	US 1992-926109	19920805
ZA 9206781	Α	19930401	ZA 1992-6781	
CA 2077708	AA	19930313	CA 1992-2077708	19920908
CA 2077708	С	20030805		
AU 9222800	A1	19930318	AU 1992-22800	19920908
AU 652662	B2	19940901	•	•
IL 103111	A1	19960723	IL 1992-103111	19920908
KR 232025	B1	19991201	KR 1992-16533	19920909
NO 9203538	Α	19930315	NO 1992-3538 EP 1992-115575	19920911
NO 179514	В	19960715		
NO 179514	С	19961023		
EP 532027	A1	19930317	EP 1992-115575	19920911
EP 532027	B1	20000712		
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IE, IT, LI,	LU, MC, NL, PT, SE
R: AT, BE, CH, JP 05213870 JP 3255989 HU 67022 HU 216788 FI 101071 AT 194599 PT 532027 ES 2149161 US 5397789 US 5498778 US 5525615	A2	19930824	JP 1992-267790	19920911
JP 3255989	B2	20020212		
HU 67022	A2	19950130	HU 1992-2923	19920911
HU 216788	В	19990830		
FI 101071	B1	19980415	FI 1992-4076 AT 1992-115575 PT 1992-115575 ES 1992-115575	19920911
AT 194599	E	20000715	AT 1992-115575	19920911
PT 532027	T	20001031	PT 1992-115575	19920911 .
ES 2149161	T3	20001101	ES 1992-115575	19920911
US 5397789	A	19950314	US 1993-170543	19931220
US 5498778	A	19960312	US 1994-352470	19941209
		19960611		19950602
US 5527812	Α	19960618		19950602
. US 5532252	Α	19960702		
US 5677315		19971014		19950602
GR 3034551	Т3	20010131		20001004
PRIORITY APPLN. INFO.:			US 1991-758063	
			US 1992-828075	
			US 1992-926109	
			US 1993-170543	
			US 1994-352470	A3 19941209

OTHER SOURCE(S):

MARPAT 121:9168

AB Title compds. I (R1, R2 = C1-3 alkyl, R1R2 = C2-7 alkylene; R3 = H, halo, C1-4 alkyl, C1-4 alkoxy, F3C, F3CO, H0; n = 0-2), spin trapping agents, useful as inhibitors of interleukin-1 secretion and for treatment of shock, are prepared To 1-benzyl-1-formamidocyclohexane was added (COCl)2 to give after workup spiro[cyclohexane-1,3']-3,4-dihydroisoquinoline which was treated with H2O2 to give I (R1-3 = H, n = 1) (II). In endotoxin-treated rats, II at 10 mg/kg showed 91% survival.

L25 ANSWER 34 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:472506 HCAPLUS

DOCUMENT NUMBER: 119:72506

TITLE: Preparation of cyclic nitrones as spin trapping

agents.

INVENTOR(S): Carr, Albert Anthony; Thomas, Craig Eugene;

> Bernotas, Ronald Charles; Ku, George Merrell Dow Pharmaceuticals, Inc., USA

PATENT ASSIGNEE(S):

SOURCE: Eur. Pat. Appl., 36 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 532027	A1	19930317	EP 1992-115575	19920911
EP 532027	B1	20000712		
R: AT, BE, CH	I, DE, DK	, ES, FR,	GB, GR, IE, IT, LI,	LU, MC, NL, PT, SE
US 5292746	Α	19940308	US 1992-926109	19920805
ZA 9206781	Α	19930401	ZA 1992-6781	19920907
PRIORITY APPLN. INFO.:			US 1991-758063	A 19910912
			US 1992-828075	A 19920130
			US 1992-926109	19920805

OTHER SOURCE(S): MARPAT 119:72506

GI

$$R^3$$
 $(CH_2)_n$
 R^1
 R^2
 N_2
 0

AΒ Title compds. I (R1, R2 = C1-3 alkyl, R1R2 = C2-7 alkylene; R3 = H, halo, C1-4 alkyl, C1-4 alkoxy, F3c, F3CO, HO; n = 0-2) useful for spin trapping for therapeutic oxygen radical scavenging and as interleukin-1 inhibitors, are prepared To PhCH2CM2NHCHO in MePh was added P2O5, the mixture refluxes for 6 h, allowed to stand overnight at room temperature, and basified with 50% NaOH to give 3,4-dihydro-3,3-dimethylisoquinoline to which in CH2Cl2 was added 3-ClC6H4COO2H to give 4,8b-dihydro-3,3-dimethyl-3Hoxazirino[3,2a]isoquinoline to which in MeOH and H2O was added H2SO4 to give I (R1 = R2 = Me, R = H) (II). In endotoxin-treated rats after 72 h exposure, II at 30 mg/kg showed 83% survival.

L25 ANSWER 35 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1992:490136 HCAPLUS

DOCUMENT NUMBER:

117:90136

TITLE:

Preparation of N-phenyl-ω-

[(heterocyclylalkyl)amino]alkanamides as

serotoninergic agonists

INVENTOR(S):

McDonald, Ian A.; Dudley, Mark W.; Bernotas,

Ronald C.; Sprouse, Jeffrey S.

PATENT ASSIGNEE(S):

Merrell Dow Pharmaceuticals Inc., USA

SOURCE:

Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	
EP 478954	A1	19920408	EP 1991-114456	19910828
EP 478954	B1	20001018		
R: AT, BE, CH,	DE, DK	, ES, FR,	GB, GR, IT, LI, LU, NL,	SE
US 5189179	A	19930223	US 1991-735700	19910730
CA 2049803	AA	19920301	CA 1991-2049803	19910823
AU 9182664	A1	19920305	AU 1991-82664	19910823
AU 641535	B2	19930923		
ZA 9106710	Α	19920527	ZA 1991-6710	19910823
IL 99306		19950330	IL 1991-99306	19910826
FI 9104065	Α	19920301	FI 1991-4065	19910828
NO 9103384	A	19920302	NO 1991-3384	19910828
NO 175430	В	19940704		
NO 175430	С	19941012		
HU 59092	A2	19920428	HU 1991-2810	19910828
AT 197040	E	20001115		
ES 2153346	Т3	20010301	ES 1991-114456	19910828
CN 1059717		19920325		
CN 1030766	В	19960124		
JP 04270264	A2	19920925	JP 1991-242328	19910829
US 5387604	Α	19950207	US 1992-962434	19921016
US 5559143	A	19960924	US 1994-319916	19941007
GR 3035062	Т3	20010330	GR 2000-402750	
PRIORITY APPLN. INFO.:			US 1990-574710	A 19900829
			US 1991-735700	
				A3 19921016

OTHER SOURCE(S):

MARPAT 117:90136

GI

RBN(X)CHYZ1DCON(Z)R1 [B-alkylene; D = bond, alkylene; R = (substituted) 3-indolyl, -2,3-dihydro-1,4-benzodioxin-2-yl; R1 = (substituted) Ph; X, Y, Z = H, alkyl, (substituted) Ph; Z1 = (substituted) alkylene] were prepared as serotoninergic S1A and S1D agonists (no data). Thus, serotonin was reductively condensed with MeCO(CH2)4CONHC6H4(CF3)-4 to give title compound I.

L25 ANSWER 36 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

1991:207641 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 114:207641

The use of triphenylphosphine-diethyl azodicarboxylate TITLE:

(DEAD) for the cyclization of 1,4- and 1,5-amino

alcohols

AUTHOR (S): Bernotas, Ronald C.; Cube, Rowena V.

CORPORATE SOURCE: Merrell Dow Res. Inst., Cincinnati, OH, 45215, USA

SOURCE: Tetrahedron Letters (1991), 32(2), 161-4

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:207641

Application of the Mitsunobu reagent (Ph3P/di-Et azodicarboxylate) to the

cyclization of 1,4- and 1,5-amino alcs. provided an assortment of

azacycles in good to excellent yield.

L25 ANSWER 37 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

1991:112317 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 114:112317

TITLE: Synthesis and properties of ferroelectric

4-[4-(S-1-methylheptyloxy)benzoyloxy]-4'-

alkyloxycarbonylbiphenyls

AUTHOR (S): Adomeniene, O.; Adomenas, P.; Bernotas, R.;

Petraitis, J.; Jakubeniene, M.

CORPORATE SOURCE: Vilnius Univ., Vilnius, USSR

Molecular Crystals and Liquid Crystals (1990), 191, SOURCE:

187-91

CODEN: MCLCA5; ISSN: 0026-8941

DOCUMENT TYPE: Journal LANGUAGE: English

Synthesis, mesomorphic properties and spontaneous polarization values of 4-[4-(S-1-methyl-heptyloxy)benzoyloxy]-4'-alkyloxycarbonylbiphenyls are

L25 ANSWER 38 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:77437 HCAPLUS

DOCUMENT NUMBER: 114:77437

TITLE: Easy assembly of ligands for glycosidase affinity

chromatography

AUTHOR (S): Bernotas, Ronald C.; Ganem, Bruce

CORPORATE SOURCE: Dep. Chem., Cornell Univ., Ithaca, NY, 14853, USA

SOURCE: Biochemical Journal (1990), 270(2), 539-40

CODEN: BIJOAK; ISSN: 0306-3275

DOCUMENT TYPE:

Journal LANGUAGE: English

An improved, high-yield synthesis of the corresponding N-carboxypentyl derivs. of 3 iminoalditol glycosidase inhibitors has been developed for

affinity chromatog. enzyme purification Reductive amination of 1-deoxynojirimycin (or its D-manno or D-galacto analogs) with methyl

5-formylvalerate and NaBH3CN at neutral pH afforded an aminoester which upon hydrolysis with aqueous 5% HCl gave the desired amino acid in 97% overall

yield. These amino acids could then be covalently attached using

water-soluble carbodiimide to 6-aminohexyl Sepharose 4B.

L25 ANSWER 39 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:41713 HCAPLUS

DOCUMENT NUMBER: 114:41713

TITLE: Enzymatic preparation of the enantiomers of some

1-phenyl-1-alkanols

AUTHOR(S): Mori, Kenji; Bernotas, Rokas

CORPORATE SOURCE: Dep. Agric. Chem., Univ. Tokyo, Tokyo, 113, Japan

SOURCE: Tetrahedron: Asymmetry (1990), 1(2), 87-96

CODEN: TASYE3; ISSN: 0957-4166

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 114:41713

The acetates of racemic 1-phenyl-1-heptanol, 1-phenyl-1-octanol, and 1-phenyl-1-nonanol were hydrolyzed by Pseudomonas lipase in 10% acetone-0.1 M phosphate buffer (pH 6.9) at 30°. Due to remarkable differences in the rates of hydrolysis of the enantiomeric acetates, the reaction led to (R)-(+)-alcs. (92.2-97.8% e.e.) and (S)-(-)-acetates (99.6-100.0% e.e.). Slow reverse esterification of 1-phenyl-1-octnaol took place in the presence of 1 equivalent of acetic acid. Addition of Et acetate markedly increased the rate of esterification to give (R)-(+)-1-phenyloctyl acetate (92.8% e.e.). Attempts to esterify racemic alcs. in organic solvents were unsuccessful because of low reaction rate and/or low enantioselectivity.

L25 ANSWER 40 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:631865 HCAPLUS

DOCUMENT NUMBER: 113:231865

TITLE: A new family of five-carbon iminoalditols which are

potent glycosidase inhibitors

AUTHOR(S): Bernotas, Ronald C.; Papandreou, George;

Urbach, Jonathan; Ganem, Bruce

CORPORATE SOURCE: Dep. Chem., Cornell Univ., Ithaca, 14853, Norway

SOURCE: Tetrahedron Letters (1990), 31(24), 3393-6

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:231865

HO

GI

ЮH Ι

AΒ The preparation of iminoalditols, e.g. I, from Me 6-bromo-6-deoxy- α -Dglucopyranoside is described. I inhibited the same group of enzymes, e.g., β -glucosidase and α -mannosidase.

L25 ANSWER 41 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:552210 HCAPLUS

DOCUMENT NUMBER: 113:152210

TITLE: The use of Pearlman's catalyst for selective

N-debenzylation in the presence of benzyl ethers

AUTHOR(S): Bernotas, Ronald C.; Cube, Rowena V.

CORPORATE SOURCE: Merrell Dow Res. Inst., Cincinnati, OH, 45215, USA

SOURCE: Synthetic Communications (1990), 20(8), 1209-12

CODEN: SYNCAV; ISSN: 0039-7911

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 113:152210

AB Hydrogenation with 20% palladium hydroxide on carbon selectively removes benzyl groups from amines in high yields without cleaving benzyl ethers.

L25 ANSWER 42 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1990:515733 HCAPLUS

DOCUMENT NUMBER:

113:115733

TITLE:

A short, versatile approach to polyhydroxylated

pyrrolidines utilizing a reductive

elimination-reductive amination as a key step

AUTHOR (S):

Bernotas, Ronald C.

CORPORATE SOURCE:

Merrell Dow Res. Inst., Cincinnati, OH, 45215, USA

SOURCE:

Tetrahedron Letters (1990), 31(4), 469-72

II

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 113:115733

GI

 $CH=CH_2$ $PhCH_2O$ $PhCH_2O$

AB An efficient synthesis of epimeric pyrrolidines I starting from Me 4,6-O-benzylidene gluco- and galactopyranosides gave ready access to hydroxylated pyrrolidines, e.g., II.

L25 ANSWER 43 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1989:75940 HCAPLUS

DOCUMENT NUMBER:

110:75940

TITLE:

A new class of endoglycosidase inhibitors. Studies on

endocellulases

AUTHOR (S):

Liotta, Louis J.; Bernotas, Ronald C.;

Wilson, David B.; Ganem, Bruce

CORPORATE SOURCE:

Dep. Chem., Cornell Univ., Ithaca, NY, 14853, USA

SOURCE:

Journal of the American Chemical Society (1989),

111(2), 783-5

CODEN: JACSAT; ISSN: 0002-7863

DOCUMENT TYPE:

Journal

LANGUAGE:

English

OTHER SOURCE(S):

CASREACT 110:75940

GI

AB Oligosaccharide analogs I [R = H, β -1,4-glucopyranosyl (II), eta-1,4-cellobiosyl (III)] were synthesized by an unusual radical rearrangement. Reductive oxygenation of organomercurial IV (Bn = PhCH2) to alc. V also produced VI resulting from C4-benzyl ether removal and concomitant reduction at C6. Changing the flow of oxidant from a vigorous flux of pure O2 to a slow stream of air (0.04 mL/s) improved the yield of VI to 68%. The scope of this reaction was probed with several other mercurials. II and III competitively inhibited three (E1, E2 and E5) of the five β -1,4-endocellulases isolated from the cellulolytic bacterium Thermomonospora fusca.

L25 ANSWER 44 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1988:423268 HCAPLUS

DOCUMENT NUMBER:

109:23268

TITLE:

Synthesis of (+)-1,5-dideoxy-1,5-imino-D-galactitol, a

potent α-D-galactosidase inhibitor

AUTHOR (S):

Bernotas, Ronald C.; Pezzone, Michael A.;

Ganem, Bruce

CORPORATE SOURCE:

Dep. Chem., Cornell Univ., Ithaca, NY, 14853, USA

SOURCE:

Carbohydrate Research (1987), 167, 305-11

CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE:

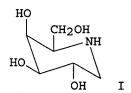
LANGUAGE:

Journal English

OTHER SOURCE(S):

GΙ

CASREACT 109:23268



AΒ The title compound (I) was prepared as its hydrochloride from Me α -D-galactopyranoside. I is a potent α -D-galactosidase inhibitor and causes elevation of total kidney-glucolipid and ceramide trihexoside levels in mice.

L25 ANSWER 45 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 1988:2541 HCAPLUS

DOCUMENT NUMBER:

108:2541

TITLE:

(3R, 4R, 5S) -5-acetamido-3, 4-piperidinediol: a

selective hexosaminidase inhibitor

AUTHOR(S):

Bernotas, Ronald C.; Ganem, Bruce

CORPORATE SOURCE:

Dep. Chem., Cornell Univ., Ithaca, NY, 14853, USA

SOURCE: Carbohydrate Research (1987), 167, 312-16

Ι

CODEN: CRBRAT; ISSN: 0008-6215

DOCUMENT TYPE:

Journal

LANGUAGE:

English

GΙ

Me 2-acetamido 3,4-di-O-benzyl-2-deoxy-D-glucopyranoside prepared as a mixture of anomers was coverted to 6-bromo derivative mixts. by treatment with mesyl chloride-Et3N and then LiBr-2-butanone. Reductive ring cleavage with activated Zn, PhCH2NH2, and NaBH3CN in PrOH-H2O (9:1) followed by in situ reductive amination, subsequently ozonolysis with reductive workup, reductive amination and debenzylation with Pd-C, EtOH and HCl, gave I. Bovine β -hexosaminidase was 50% inhibited by I at 0.1mM, whereas almond β -D-glucosidase, bovine β -D-galactosidase, endoglycosidase F and H were unaffected at 1.0mM.

L25 ANSWER 46 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1987:29253 HCAPLUS

DOCUMENT NUMBER:

106:29253

TITLE:

Design and synthesis of sugar-specific glycosidase

inhibitors

AUTHOR (S):

Bernotas, Ronald Charles

CORPORATE SOURCE:

Cornell Univ., Ithaca, NY, USA

SOURCE:

(1986) 143 pp. Avail.: Univ. Microfilms Int., Order

No. DA8607290

From: Diss. Abstr. Int. B 1986, 47(2), 628

DOCUMENT TYPE:

Dissertation

LANGUAGE:

English

AB Unavailable

L25 ANSWER 47 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1986:424547 HCAPLUS

DOCUMENT NUMBER:

105:24547

TITLE:

Synthesis of 2S-carboxy-3R,4R,5S-trihydroxypiperidine,

a naturally occurring inhibitor of

β-D-glucuronidase

AUTHOR (S):

Bernotas, Ronald C.; Ganem, Bruce

CORPORATE SOURCE:

Dep. Chem., Cornell Univ., Ithaca, NY, 14853, USA

SOURCE:

Tetrahedron Letters (1985), 26(41), 4981-2

DOGINATIVE WILDE

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: LANGUAGE: Journal English

OTHER SOURCE(S):

CASREACT 105:24547

GI

HO PhCH₂O PhCH₂O II

AB The glucuronic acid analog I of 1-deoxynojirimycin was synthesized in good overall yield from bromomercurial II by stepwise oxidation and debenzylation.

L25 ANSWER 48 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:523832 HCAPLUS

DOCUMENT NUMBER: 103:123832

TITLE: Efficient preparation of enantiomerically pure cyclic

aminoalditols, total synthesis of 1-deoxynojirimycin

and 1-deoxymannojirimycin

AUTHOR(S): Bernotas, Ronald C.; Ganem, Bruce

CORPORATE SOURCE: Dep. Chem., Cornell Univ., Ithaca, NY, 14853, USA

SOURCE: Tetrahedron Letters (1985), 26(9), 1123-6

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 103:123832

GI

CH₂OH OH OH I HO OH

AB The title compds. (I and II) were prepared by methods involving a high-yield, ring-forming aminomercuration. I was obtained in several steps from Me $\alpha\text{-D-glucopyranoside}$ in 35% overall yield. II was obtained in several steps from Me $\alpha\text{-D-mannopyranoside}$ in 13% overall yield.

L25 ANSWER 49 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1984:192129 HCAPLUS

DOCUMENT NUMBER: 100:192129

TITLE: Total syntheses of (+)-castanospermine and

(+)-deoxynojirimycin

AUTHOR(S): Bernotas, Ronald C.; Ganem, Bruce

CORPORATE SOURCE: Baker Lab., Cornell Univ., Ithaca, NY, 14853, USA

SOURCE: Tetrahedron Letters (1984), 25(2), 165-8

CODEN: TELEAY; ISSN: 0040-4039

DOCUMENT TYPE: Journal LANGUAGE: English

LANGUAGE: English

AB The absolute configuration of castanospermine (I) was determined by total synthesis

from D-glucose.

L25 ANSWER 50 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1981:603478 HCAPLUS

DOCUMENT NUMBER:

95:203478

TITLE:

Chiral nematic tolans

AUTHOR (S):

Bernotas, R.; Adomenas, P.

CORPORATE SOURCE:

Chem. Dep., V. Kapsukas Vilnius Univ., Vilnius,

232006, USSR

SOURCE:

Adv. Liq. Cryst. Res. Appl., Proc. Liq. Cryst. Conf. Soc. Countries, 3rd (1981), Meeting Date 1979, Volume

2, 1019-22. Editor(s): Bata, Lajos. Pergamon:

Oxford, Engl.

CODEN: 46KUA2

DOCUMENT TYPE:

Conference

LANGUAGE:

English

GΙ

$$\texttt{EtCHMeCH}_2 - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} \equiv \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} = \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} = \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} = \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} = \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} = \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm} - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} = \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm} - \hspace{-1mm} \bigcirc \hspace{-1mm} C \hspace{-1mm} = \hspace{-1mm} C \hspace{-1mm} - \hspace{-1mm}$$

AB Liquid crystals I (R = Me, Et, Pr, Bu, pentyl, hexyl, heptyl, decyl) were synthesized and transition temps. and enthalpies of fusion were measured.

L25 ANSWER 51 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1981:524545 HCAPLUS

DOCUMENT NUMBER:

95:124545

TITLE:

4-[(+)-2-Methylbutyl]-4'-alkoxytolan possessing chiral

nematic liquid crystal properties

INVENTOR(S):

Bernotas, R.; Sirutkajtis, R.; Adomenas, P.

PATENT ASSIGNEE(S):

Vilnius State University, USSR

SOURCE:

U.S.S.R. From: Otkrytiya, Izobret., Prom. Obraztsy,

Tovarnye Znaki 1981, (20), 257-8.

CODEN: URXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Russian

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
SU 754815	A1	19810530	SU 1979-2713095		19790112
PRIORITY APPLN. INFO.:			SU 1979-2713095	Α	19790112
AB (+)-p-EtCHMeCH2C6H40 chiral nematic prope		nd.CC6H4OR-p	(R = C6H13, C7H15,	C10H	21) have

L25 ANSWER 52 OF 52 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1977:155484 HCAPLUS

DOCUMENT NUMBER:

86:155484

TITLE:

Synthesis and some reactions of N-(β -

acylethyl) aminopyridines and -aminoquinolines AUTHOR (S):

Denys, G.; Gureviciene, J.; Macionyte, V.;

Bernotas, R.; Cekuoliene, L.

CORPORATE SOURCE:

Vil'nyus. Gos. Univ. im. Kapsukasa, Vilnius, USSR Zhurnal Organicheskoi Khimii (1977), 13(1), 199-204

CODEN: ZORKAE; ISSN: 0514-7492

DOCUMENT TYPE:

Journal

LANGUAGE:

SOURCE:

Russian

GT

AB Reaction of RNH2 (R = 2-, 3-, 4-pyridyl, 4-methyl-2-pyridyl, 2-, 3-, 4-, 5-, 6-, 8-quinolyl) with R1COCH2CH2NMe2 (R1 = Ph, p-MeOC6H4, p-BrC6H4, p-02NC6H4, p-tolyl, p-ClC6H4) gave RNHCH2CH2COR1 (I), RN(CH2CH2COR1)2 and II. I (R1 = Ph, R = 5-, 6-, and 8-quinolyl) were cyclized by refluxing their HCl salts in PrOH. Reaction of I (R = 2-pyridyl, R1 = Ph, p-MeOC6H4) with HNO2 gave III, which were cyclized with Zn to give IV. Treatment of IV with S gave the resp. 1H-pyrazole.

=> => d stat que

L25

52 SEA FILE=HCAPLUS ABB=ON PLU=ON ("BERNOTAS R"/AU OR "BERNOTAS ROKAS"/AU OR "BERNOTAS RONALD"/AU OR "BERNOTAS RONALD C"/AU OR "BERNOTAS RONALD CHARLES"/AU)

L26

3 SEA FILE=HCAPLUS ABB=ON PLU=ON ("LENICEK S"/AU OR "LENICEK STEVEN"/AU OR "LENICEK STEVEN EDWARD"/AU) NOT L25

=> =>

=> d ibib abs 126 1-3

L26 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:120921 HCAPLUS

DOCUMENT NUMBER: TITLE:

142:219150

A preparation of 3-aminochroman and 2-aminotetralin

derivatives, useful in the treatment of

serotonin-mediated disorders

INVENTOR(S):

Hatzenbuhler, Nicole Theriault; Evrard, Deborah Ann; Mewshaw, Richard Eric; Zhou, Dahui; Shah, Uresh Shantilal; Inghrim, Jennifer Ann; Lenicek, Steven Edward; Baudy, Reinhardt Bernhard; Butera, John Anthony; Sabb, Annmarie L.; Failli, Amedeo Arturo;

Ramamoorthy, Pudukkaraipudur Sivaramakrishnan

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 233 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

		KIND DATE			APPLICATION NO.						DATE						
	WO 2005012291			A1 200		2005	0210	1	WO 2	 004-1	US24!	549		2	0040	729	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DΕ,	DK,	DM,	DΖ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	ΚZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	ΜZ,	NA,	NI,
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	zw
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,
		SN,	TD,	TG													
	US 2005	0328	73		A1		2005	0210	1	US 2	004-	8988	66		2	0040	726
PRIO	RITY APP	LN.	INFO	. :					1	US 2	003-4	4911:	37P		P 2	0030	730
									1	US 2	003-4	4917	94P	:	P 2	0030	801
									1	US 2	004-	8988	56	1	A 2	0040	726

OTHER SOURCE(S):

MARPAT 142:219150

GΙ

The invention relates to a preparation of 3-aminochroman and 2-aminotetralin derivs. of formula I [wherein: X is O or CH2; R1 is H, (cyclo)alkyl, or oxetane, etc.; R2 is (CH2)2-4-R5; R3 is OMe, C(O)(alkyl), or heterocycle, etc.; R4 is H or halogen; R5 is derivative of indole, benzothiophene, or benzofuran, etc.], useful in the treatment of serotonin-mediated disorders. The invention compds. are useful for the treatment of serotonin-mediated disorders such as depression and anxiety. For

instance, (indolylpropylamino)chroman derivative II (5-HT transporter affinity: Ki = 7 nM, 5-HT1A function cAMP: EC50 = 228.5 nM) was prepared via N-alkylation of 3-amino-8-fluorochroman-5-carboxamide by

3-(3-bromopropyl)-5-fluoro-1H-indole with a yield of 60%.

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

- RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:282557 HCAPLUS

DOCUMENT NUMBER:

138:304162

TITLE:

Preparation of 2-(aminoalkyl)chromans and benzofurans as 5-hydroxytryptamine-6 ligands for treatment of CNS

disorders

INVENTOR (S):

Kelly, Michael Gerard; Greenblatt, Lynne Padilla; Zhang, Gan; Palmer, Yvette Latko; Lenicek, Steven

Edward

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 70 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE		APPLICATION NO.	DATE		
· · · · · · · · · · · · · · · · · · ·						
WO 2003029239	A1	20030410	WO 2002-US31151	20020930		
W: AE, AG, AL,	AM, AT	, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,		
CO, CR, CU,	CZ, DE	, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,		
GM, HR, HU,	ID, IL	, IN, IS,	JP, KE, KG, KP, KR,	KZ, LC, LK, LR,		
LS, LT, LU,	LV, MA	, MD, MG,	MK, MN, MW, MX, MZ,	NO, NZ, OM, PH,		
PL, PT, RO,	RU, SD	, SE, SG,	SI, SK, SL, TJ, TM,	TN, TR, TT, TZ,		
UA, UG, UZ,	VN, YU	, ZA, ZM,	ZW			
RW: GH, GM, KE,	LS, MW	, MZ, SD,	SL, SZ, TZ, UG, ZM,	ZW, AM, AZ, BY,		
			BE, BG, CH, CY, CZ,			
			MC, NL, PT, SE, SK,			
			ML, MR, NE, SN, TD,			
			US 2002-263913			
US 6638972	B2	20031028				
PRIORITY APPLN. INFO.:			US 2001-326970P	P 20011004		
OTHER SOURCE(S):	MARPAT	138:30416	52			
GI						

$$(R^{1})_{p}$$
 $(CH_{2})_{n}$
 R^{2}
 R^{5}
 $(CR^{3}R^{4})_{m}-N-R^{6}$
 I

AB The present invention provides a compound I and the use thereof for the therapeutic treatment of disorders relating to or affected by the 5-HT6 receptor. Title compds. I [wherein R = (un)substituted alkyl or (hetero)aryl; R1 = halo, CN, OR7, CO2R8, CONR9R10, SOxR11, or (un) substituted alkyl, alkenyl, alkynyl, cyclo(hetero) alkyl, Ph, or heteroaryl; R2, R3, and R4 = independently H or (un)substituted alkyl; R5 and R6 = independently H or (un) substituted alkyl or (hetero) cycloalkyl; or NR5R6 = (un)substituted heterocyclyl; m = 1-4; n = 0-1; p = 0-3; x = 00-2; R7 = H, CO2R12, or (un)substituted alkyl, alkenyl, alkynyl, or (hetero)aryl; R8 and R12 = independently H or (un)substituted alkyl, alkenyl, alkynyl, cyclo(hetero)alkyl, or (hetero)aryl; R9 and R10 = independently H or (un) substituted alkyl; R11 = (un) substituted alkyl or (hetero)aryl; or stereoisomers or pharmaceutically acceptable salts thereof] were prepared as 5-hydroxytryptamine-6 (5-HT6) ligands. For example, cycloaddn. of 2',4'-dihydroxyacetophenone with di-Et oxalate in NaOEt and EtOH provided Et 7-hydroxy-4-oxo-4H-benzopyran-2-carboxylate (68%). Hydrogenation with Pd/C in AcOH to the chroman (96%), reaction of the alc. with benzyl chloride in the presence of K2CO3 and KI in acetone to the ether (100%), and reduction of the ester to the hydroxymethyl derivative (93%) gave [(7-benzyloxy)chroman-2-yl]methanol. Bromination (100%), amination using potassium phthalimide and NH2NH2+H2O in DMF, and conversion to the salt afforded II-HCl. The latter exhibited binding to the 5-HT6 receptor with Ki of 15 nM in cultured HeLa cells expressing human cloned 5-HT6 receptors. Thus, I are useful for the treatment of CNS disorders, such as motor disorder, anxiety, cognitive disorder, schizophrenia, depression, Alzheimer's disease, Parkinson's disease, and attention deficit disorder (no data).

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L26 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2000:796115 HCAPLUS

TITLE:

In vitro activity of chiral analogs of the serotonin

5-HT1A silent antagonist WAY-100635.

AUTHOR (S):

Lenicek, S.; Kelly, M. G.; Childers, W. E.; Greenblatt, L.; Sabb, A.; Zhang, G.; Palmer, Y.; Podlesny, E.; Vogel, R.; Smith, D. L.; Schechter, L.

Ε.

CORPORATE SOURCE:

Chemical Sciences and Neuroscience, Wyeth-Ayerst

Research, Princeton, NJ, 08543, USA

SOURCE:

Abstracts of Papers, 220th ACS National Meeting,

Washington, DC, United States, August 20-24, 2000

(2000) MEDI-118 CODEN: 69FZC3

PUBLISHER: American Chemical Society DOCUMENT TYPE: Journal; Meeting Abstract

LANGUAGE: English

AB Silent antagonists at the 5-HT1A receptor, e.g. WAY-100635, are potential therapeutic agents for various CNS disorders. With the aim of improving pharmacol. properties, a series of chiral amino acid-derived compds. (1) was prepared, varying the substituent on the 1-position of the alkyl chain. The 5-HT1A in vitro binding and SAR of the compds. will be presented.

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=> d stat que

L25 52 SEA FILE=HCAPLUS ABB=ON PLU=ON ("BERNOTAS R"/AU OR "BERNOTAS ROKAS"/AU OR "BERNOTAS RONALD"/AU OR "BERNOTAS RONALD C"/AU OR "BERNOTAS RONALD CHARLES"/AU)

L26 3 SEA FILE=HCAPLUS ABB=ON PLU=ON ("LENICEK S"/AU OR "LENICEK STEVEN"/AU OR "LENICEK STEVEN EDWARD"/AU) NOT L25

L27 57 SEA FILE=HCAPLUS ABB=ON PLU=ON ("ELOKDAH H"/AU OR "ELOKDAH HASSAN"/AU OR "ELOKDAH HASSAN M"/AU OR "ELOKDAH HASSAN

MAHMOUD"/AU) NOT (L25 OR L26)

=> d ibib abs 127 1-57

L27 ANSWER 1 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:300437 HCAPLUS

DOCUMENT NUMBER:

142:355272

TITLE:

=>

A preparation of heteroarylbenzofuran derivatives,

useful as PAI-1 inhibitors

INVENTOR(S):

Elokdah, Hassan Mahmoud; McFarlane, Geraldine Ruth; Mayer, Scott Christian Wyeth, John, and Brother Ltd., USA

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 44 pp.

CODEN: PIXXD2

Patent

DOCUMENT TYPE: LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE			APPLICATION NO.					DATE				
		-				_	-	 -			-			-	-		
WO	2005	0307	60		A1		2005	0407	1	WO 2	004-	US31	364		2	0040	924
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
																KZ,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	ΤZ,	ŪĠ,	ZM,	ZW,	AM,
		AZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
																MR,	
			TD,													•	•

PRIORITY APPLN. INFO.:

US 2003-506012P US 2004-947840 P 20030925 A 20040923

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a preparation of heteroarylbenzofuran derivs. of formula I [wherein: R, R1, R2, and R3 are independently selected from H, (cyclo)alkyl, alkanoyl, halogen, OH, aryl, or NH2, etc.; R4 is H, alk(en/yn)yl, aryl, arylalkenyl, or C(:S)-alkyl, etc.; R5 is H, alkyl, aryl, or arylalkyl; X1, X2, X3, X4, X5, X6, X7, and X8 are independently selected from C or N, wherein at least one of X1-X8 is a nitrogen atom; Y is (CH2)0-6; A is CO2H, acid mimic, or salt], useful as PAI-1 inhibitors. For instance, benzofuranyl(tetrazolylmethoxy)quinoline derivative II (20% inhibition at 25 μM) was prepared via heterocyclization of [(benzofuranylquinolinyl)oxy]acetonitrile derivative III with sodium azide

with a yield of 73%.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 2 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:300393 HCAPLUS

DOCUMENT NUMBER:

142:355053

TITLE:

Preparation of Biphenyloxycarboxylic acids and derivatives thereof as inhibitors of PAI-1

INVENTOR(S):

Commons, Thomas Joseph; Croce, Susan Christman;

Trybulski, Eugene John; Elokdah, Hassan

Mahmoud; Crandall, David Leroy

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 86 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATI	PATENT NO.					KIND DATE			APPLICATION NO.						DATE			
						-						-			-			
WO 2	2005	0307	02		A1	:	2005	0407	1	WO 2	004-1	US31	458		2	0040	924	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KΕ,	KG,	KP,	KR,	ΚZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
													VN,					
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	
													NL,					
		SI,	sĸ,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NΕ,	
		SN,	TD,	TG														
PRIORITY	APP]	LN.	INFO	. :					US 2003-505989P						P 2	0030	925	
									1	JS 2	004-	9477	10		A 2	0040	923	

GΙ

$$R^{1}$$
 R^{2}
 R^{3}
 R

Title compds. I [Ar = Ph, naphthyl, furanyl, etc.; R1 = H, alkyl, AΒ alkylphenyl; R2-3 = H, alkyl, halo, etc.; R4 = alkylcarboxy, alkyltetrazole, etc.; n = 0-1] are prepared For instance, [[4'-[[[1-phenyl-5-(trifluoromethyl)-1H-pyrazol-4yl]carbonyl]amino]methyl][1,1'-biphenyl]-4-yl]oxy]acetic acid (II) is prepared in 6 steps from 4'-Hydroxybiphenyl-4-carbonitrile, Me bromoacetate and 1-phenyl-5-trifluoromethyl-1H-pyrazole-4-carbonyl chloride. II exhibited 1% inhibition of PAI-1 at 25 µM and 60% inhibition at 100 μM. I are useful for the treatment of, e.g., thrombosis. 3

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 3 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:300247 HCAPLUS

DOCUMENT NUMBER:

142:373672

TITLE:

A preparation of benzofuran derivatives, useful as

PAI-1 inhibitors

INVENTOR(S):

Havran, Lisa Marie; Butera, John Anthony; Elokdah, Hassan Mahmoud; Jenkins, Douglas

John; Gundersen, Eric Gould

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 52 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
					_									-		
WO 2005	0301	99		A1		2005	0407	1	WO 2	004-1	US31:	361		2	0040	924
w:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,
	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	ıs,	JΡ,	KΕ,	KG,	ΚP,	KR,	ΚZ,	LC,
	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	.MX,	MZ,	NA,	NI,
	NO,	ΝZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW
RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,
	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	AT,	BE,	ВG,	CH,	CY,	CZ,	DE,	DK,

EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,

SN, TD, TG

PRIORITY APPLN. INFO.:

US 2003-505801P P 20030925 US 2004-947930 A 20040923

GI

AB The invention relates to a preparation of benzofuran derivs. of formula I [wherein: R1 and R2 are independently selected from H, halogen, alkyl, OH, NH2, or (hetero)aryl, etc.; R3 is H, (cyclo)alkyl, heteroaryl, or CH2-cycloalkyl, etc.; R4 is H or (cyclo)alkyl; Y is 1-3 substituted Ph derivative; X is (cyclo)alkylene, (CH2)1-6-0, or (CH2)1-6-NH], useful as PAI-1 inhibitors. The invention compds. are useful for treatment of impairment of the fibrinolytic system, thrombosis, or cardiovascular diseases, etc. For instance, benzofuran derivative II (IC50 = 31.35 μM) was prepared via coupling of benzofurancarbaldehyde oxime derivative III with Me (4-hydroxyphenyl)acetate with a yield of 39%.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:300241 HCAPLUS

DOCUMENT NUMBER: 142:355162

TITLE: Preparation of 4-(1H-indol-3-yl-

methylideneaminoxypropoxy) benzoic acid derivatives and

related compounds as PAI-1 inhibitors for the

treatment of impairment of the fibrinolytic system and

of thrombosis

INVENTOR(S): Havran, Lisa Marie; Butera, John Anthony;

Elokdah, Hassan Mahmoud; Jenkins, Douglas

John; Gundersen, Eric Gould

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PAT	PATENT NO.					D	DATE		i	APPL	ICAT:	ION I		DATE				
	-																	
WO	<i>1</i> O 2005030192			A1 2005040			0407	WO 2004-US31456						20040924				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	ΡL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	
·		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	
		SN,	TD,	TG														
PRIORITY	APP	LN.	INFO	. :					1	US 2003-505801P					P 20030925			
									1	US 2	004-	9478	46	7	A 20	0040	923	
GI											-							

 $\begin{array}{c|c}
R^{1-A} \\
R^{2} \\
R^{3} \\
R^{7} \\
R^{6}
\end{array}$

AB Title compds. I [R1 = bond, alkylene, etc.; R2-3 = H, halo, alkyl, etc.; R4 = H, (cyclo)alkyl; A = COOH, carboxy mimic; X = alkylene, cycloalkylene; R5 = H, alkyl, cycloalkyl, etc.; R6 = H, (cyclo)alkyl, etc.; R7-8 = H, halo, alkyl, perfluoroalkyl, etc.] are prepared For instance, (E)-4-[3-[[(1-Benzyl-1H-indol-3-yl)methylidene]amino]oxy]propox y]-2-[(4-tert-butylbenzoyl)amino]benzoic acid (II) is prepared in 9 steps from 4-nitroanthranilic acid, 4-(tert-butyl)benzoyl chloride and 1-benzyl-1H-indol-3-carboxaldehyde O-(3-hydroxypropyl)oxime (preparation given). II has IC50 = 11.81 μM for PAI-1. I are useful for the treatment of fibrinolytic system thrombosis.

REFERENCE COUNT: 11

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 5 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:284149 HCAPLUS

DOCUMENT NUMBER:

142:336368

Ι

TITLE:

A preparation of naphthylbenzothiophene derivatives,

useful as inhibitors of plasminogen activator

inhibitor-1 (PAI-1)

INVENTOR(S):

Elokdah, Hassan Mahmoud; McFarlane,

Geraldine Ruth

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

U.S. Pat. Appl. Publ., 25 pp. SOURCE:

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO.					KIND DATE				•	APPL	ICAT	DATE					
	US	2005070587			A1 20050331			1	US 2	004-	-	20040923						
	WO	2005030750			A1	A1 20050407				WO 2	004-1		20040924					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
								DE,								-		
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
			NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
			ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
		RW:	BW,	GH,	GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
			ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
			EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,
			SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,
			SN,	TD,	TG													
PRIC	RITY	APP	LN.	INFO	. :					1	US 2	003-	5059	82P	1	P 2	0030	925
										1	US 2	004-	9478	98	7	A 2	0040	923
GT																		

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a preparation of naphthylbenzothiophene derivs. of formula I [wherein: R1 and R3 are independently selected from H, (cyclo)alkyl, halogen, (hetero)aryl, or NH2, etc.; R2 is H, alkyl, (hetero) aryl, alkenyl, or perfluoroalkyl, etc.; R4 is naphthyl derivative], useful as inhibitors of plasminogen activator inhibitor-1 (PAI-1). For instance, naphthylbenzothiophene derivative II (59% inhibition at 25 μM) was prepared via heterocyclization of III with sodium azide with a yield of 49.8%.

L27 ANSWER 6 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2005:284147 HCAPLUS

DOCUMENT NUMBER:

142:355039

TITLE:

GI

Preparation of substituted aryloximes as inhibitors of

PAI-1

INVENTOR (S):

Havran, Lisa Marie; Butera, John Anthony; Elokdah, Hassan Mahmoud; Jenkins, Douglas

John; Gundersen, Eric Gould

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE: U.S. Pat. Appl. Publ., 32 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005070584	A1	20050331	US 2004-948611	20040923
WO 2005030193	A1	20050407	WO 2004-US31460	20040924

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:

US 2003-505801P P 20030925 US 2004-948611 A 20040923

GI

$$\begin{array}{c|c}
R^{1-A} \\
R^{2} \\
R^{6} \\
R^{5}
\end{array}$$

AB Title compds. I [R1 = bond, alkylene, etc.; R2-3 = H, halo, alkyl, etc.; R4 = H, (cyclo)alkyl; A = carboxy or acid mimic; X = (cyclo)alkylene, alkoxy; R5-6 = H, halo, alkyl, etc.] are prepared For instance, [4-[3-[[[1-(4-tert-butylphenyl)ethylidene]amino]oxy]propoxy]phenyl]acetic acid (II) is prepared from Me 4-hydroxyphenylacetic acid, 1,3-dibromopropane and 1-(4-tert-butylphenyl)ethanone oxime. At 25 μ M, II exhibited 39% inhibition of PAI-1. I are useful for the treatment of, e.g., thrombosis.

L27 ANSWER 7 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

Ι

ACCESSION NUMBER:

2005:61463 HCAPLUS

DOCUMENT NUMBER:

142:309533

TITLE:

Pharmacological Inhibition and Genetic Deficiency of

Plasminogen Activator Inhibitor-1 Attenuates Angiotensin II/Salt-Induced Aortic Remodeling

AUTHOR (S):

Weisberg, Alec D.; Albornoz, Francisco; Griffin, Jane

P.; Crandall, David L.; Elokdah, Hassan;

Fogo, Agnes B.; Vaughan, Douglas E.; Brown, Nancy J.

CORPORATE SOURCE:

Department of Medicine, Divisions of Clinical

Pharmacology, Vanderbilt University Medical Center,

Nashville, TN, USA

SOURCE:

Arteriosclerosis, Thrombosis, and Vascular Biology

(2005), 25(2), 365-371

CODEN: ATVBFA; ISSN: 1079-5642

PUBLISHER: DOCUMENT TYPE:

Lippincott Williams & Wilkins Journal

LANGUAGE:

English

AB Objective- To test the hypothesis that pharmacol. plasminogen activator inhibitor (PAI)-1 inhibition protects against renin-angiotensin-aldosterone system-induced cardiovascular injury, the effect of a novel

orally active small-mol. PAI-1 inhibitor, PAI-039, was examined in a mouse model of angiotensin (Ang) II-induced vascular remodeling and cardiac fibrosis. Methods and Results- Uninephrectomized male C57BL/6J mice were randomized to vehicle s.c., Ang II (1 μ g/h) s.c., vehicle+PAI-039 (1 mg/g chow), or Ang II+PAI-039 during high-salt intake for 8 wk. Ang II caused significant medial, adventitial, and aortic wall thickening compared with vehicle. PAI-039 attenuated Ang II-induced aortic remodeling without altering the pressor response to Ang II. Ang II increased heart/body weight ratio and cardiac fibrosis. PAI-039 did not attenuate the effect of Ang II on cardiac hypertrophy and increased The effect of PAI-039 on Ang II/salt-induced aortic remodeling fibrosis. and cardiac fibrosis was comparable to the effect of genetic PAI-1 deficiency. Ang II increased aortic mRNA expression of PAI-1, collagen I, collagen III, fibronectin, osteopontin, monocyte chemoattractant protein-1, and F4/80. PAI-039 significantly decreased the Ang II-induced increase in aortic osteopontin expression at 8 wk. Conclusions- This study demonstrates that pharmacol. inhibition of PAI-1 protects against Ang II-induced aortic remodeling. Future studies are needed to determine whether the interactive effect of Ang II/salt and reduced PAI-1 activity on cardiac fibrosis is species-specific.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 8 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:1025251 HCAPLUS

TITLE:

Synthesis of a Biologically Active Naphthyl Benzofuran

Derivative in Plasminogen Activator Inhibitor-1

(PAI-1) Program

AUTHOR (S):

Wang, Zheng; Elokdah, Hassan; Antane,

Madelene; McFarlane, Geraldine; Pan, Sherry

CORPORATE SOURCE:

Chemical and Screening Sciences, Wyeth Research,

Princeton, NJ, 08543, USA

SOURCE:

Abstracts, 32nd Northeast Regional Meeting of the American Chemical Society, Rochester, NY, United States, October 31-November 3 (2004), GEN-095. American Chemical Society: Washington, D. C.

CODEN: 69FWEU

DOCUMENT TYPE:

Conference; Meeting Abstract

LANGUAGE:

English

AB A biol. active naphthyl benzofuran derivative 1 has been synthesized by two approaches: Approach I highlights Suzuki coupling of a benzofuran fragment and a naphthalene fragment followed by a regioselective acylation of the benzofuran derivative and a regioselective bromination of the biaryl analog. Approach II is more concise and it highlights a regioselective Suzuki coupling of a benzofuran and a dibromo substituted naphthalene, which shortened the synthesis. Approach II can be scaled up to 50.apprx.100 g (Hassan Elokdah, Geraldine McFarlane, Scott Mayer and David Crandall, US 6,599,925).

L27 ANSWER 9 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:762122 HCAPLUS

DOCUMENT NUMBER:

142:86256

TITLE:

Characterization and comparative evaluation of a structurally unique PAI-1 inhibitor exhibiting oral

in-vivo efficacy

AUTHOR (S):

Crandall, D. L.; Elokdah, H.; Di, L.;

Hennan, J. K.; Gorlatova, N. V.; Lawrence, D. A.

CORPORATE SOURCE:

Cardiovascular and Metabolic Disease Research, Wyeth

Research, Collegeville, PA, USA

SOURCE:

Journal of Thrombosis and Haemostasis (2004), 2(8),

1422-1428

CODEN: JTHOA5; ISSN: 1538-7933

PUBLISHER: Blackwell Publishing Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Plasminogen activator inhibitor-1 (PAI-1) is the major physiol. inhibitor of both tissue-type plasminogen activator (tPA) and urokinase-type plasminogen activator (uPA). Elevated levels of PAI-1 are associated with thrombosis and vascular disease, suggesting that high plasma PAI-1 may promote a hypercoagulable state by disrupting the natural balance between fibrinolysis and coagulation. In this study, we identify WAY-140312 as a structurally novel small mol. inactivator of PAI-1, compare its inhibitory activity with other previously identified small mol. inhibitors, and investigate the mechanism of inactivation of PAI-1 in the presence of both tPA and uPA. In an immunofunctional assay, WAY-140312 inhibited PAI-1 with an estimated inhibitory concentration (IC50) of 11.7 μM, which was the

value obtained of the four different PAI-1 inactivators tested. Surface activity profiling indicated that the critical micelle concentration for WAY-140312

was 95.8 μ M, and that each inhibitor exhibited unique phys. chemical properties. Using a sensitive direct activity assay, the IC50 for WAY-140312 was similar when either tPA or uPA was used as the target protease. Immunoblot anal. demonstrated that WAY-140312 near the IC50 inhibited the complex formation between either tPA or uPA and PAI-1. After oral administration, WAY-140312 exhibited 29% bioavailability with a plasma half-life of approx. 1 h. In an in-viva model of vascular injury, a 10 mg kg-1 oral dose of WAY-140312 was associated with improvement in arterial blood flow and reduction in venous thrombosis. Thus, WAY-140312 represents a structurally novel small mol. inhibitor of PAI-1, and is the first such mol. to exhibit efficacy in animal models of vascular disease following oral administration.

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 10 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:658124 HCAPLUS

TITLE: Design, synthesis and SAR of substituted pyranoindoles

as inhibitors of plasminogen activator inhibitor-1 (PAI-1) useful in the treatment of atherothrombosis

and fibrinolytic disorders

AUTHOR(S): Li, David Z.; Elokdah, Hassan; McFarlane,

Geraldine; Crandall, David L.

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research,

Princeton, NJ, 08543, USA

SOURCE: Abstracts of Papers, 228th ACS National Meeting,

Philadelphia, PA, United States, August 22-26, 2004

(2004), MEDI-260. American Chemical Society:

Washington, D. C. CODEN: 69FTZ8

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB High levels of plasminogen activator inhibitor-1 (PAI-1) have been associated with impaired fibrinolysis. PAI-1 has been implicated in a variety of chronic and acute diseases originating from fibrinolytic impairment such as deep vein thrombosis, coronary heart disease, pulmonary embolism, polycystic ovary syndrome, etc. Accordingly, agents that inhibit PAI-1 would be of utility in treating these disorders. We have developed a series of substituted indole carboxylic acid derivs. as PAI-1 inhibitors. The lead compound in the series, PAI-039 (1) is efficacious in the rat

thrombosis model when given orally at 1 mpk. Current work is focused on expanding the SAR of the indole series. Our goal is to discover potent and selective novel PAI-1 inhibitors. A series of pyranoindoles was explored. Compound (2) inhibited PAI-1 with an IC50 of 2.28 uM and was shown to have in vivo efficacy in the thrombosis model. Design, synthesis and SAR of this class of compds. as well as in vivo efficacy of the lead compound (2) will be presented.

L27 ANSWER 11 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:657007 HCAPLUS

TITLE:

QSAR and molecular modeling studies of small molecule

inhibitors of Plasminogen Activator Inhibitor-1

AUTHOR (S):

Fan, Kristi Yi; Elokdah, Hassan; Crandall, David L.; Aulabaugh, Ann; Katz, Alan H.

CORPORATE SOURCE:

Chemical and Screening Sciences, Wyeth Research,

Princeton, NJ, 08543, USA

SOURCE:

Abstracts of Papers, 228th ACS National Meeting, Philadelphia, PA, United States, August 22-26, 2004

(2004), COMP-169. American Chemical Society:

Washington, D. C. CODEN: 69FTZ8

DOCUMENT TYPE:

Conference; Meeting Abstract

LANGUAGE: English

Plasminogen activator inhibitor-1 (PAI-1) is the major physiol. inhibitor of the serine proteases, tPA and uPA, and it is a major regulatory component of the plasminogen-plasmin system. Elevated plasma PAI-1 level is associated with decreased fibronolysis and increased risk of thrombosis and hyper-coagulation in a number of acute and chronic disorders. knock out mice are viable and protected from the development of atherosclerosis. Humans lacking the PAI-1 gene lead normal lives. data suggest that modulation of PAI-1 activity offers a beneficial therapeutic for intervention in these diseases originating from fibrinolytic disorders. We present a unique approach to QSAR studies based on a data set of 90 inhouse compds. The IC50s are obtained from a kinetic assay in which the concentration of free PAI-1 is determined by monitoring the

activity of tPA. A number of mol. descriptors were found to correlate with activity, and a corresponding pharmacophore model was developed using CATALYST.

L27 ANSWER 12 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:515514 HCAPLUS

DOCUMENT NUMBER:

141:71529

TITLE:

Preparation of substituted dihydropyranoindole-3,4-

dione derivatives as inhibitors of plasminogen

activator inhibitor-1 (PAI-1)

INVENTOR(S):

Elokdah, Hassan Mahmoud; Li, David Zenan

PATENT ASSIGNEE(S):

Wyeth, USA

SOURCE:

PCT Int. Appl., 50 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

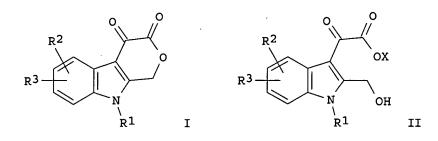
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004052893	A2	20040624	WO 2003-US38932	20031209
WO 2004052893	A3	20040812		

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CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG PRIORITY APPLN. INFO:

US 2002-432327P P 20021210

OTHER SOURCE(S):

MARPAT 141:71529
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AB The title compds. [I and II; X = H, alkali metal or a basic amine moiety; R1 = alkyl, cycloalkyl, CH2(cycloalkyl), pyridinyl, CH2(pyridinyl), Ph, CH2Ph, the rings of these groups being optionally substituted; R2 = H, halo, alkyl, perfluoroalkyl, alkoxy, cycloalkyl, CH2(cycloalkyl), NH2, NO2; R3 = Ph, CH2Ph, OCH2Ph, pyridinyl, CH2(pyridinyl), etc., with the rings of these groups being optionally substituted] or a pharmaceutically acceptable salt or ester forms thereof, useful as inhibitors of plasminogen activator inhibitor-1 (PAI-1) for treating conditions resulting from fibrinolytic disorders such as deep vein thrombosis and coronary heart disease, and pulmonary fibrosis, were prepared E.g., a 7-step synthesis of 9-(4-methylbenzyl)-6-[4-(trifluoromethoxy)phenyl]-1,9dihydropyrano[3,4-b]indole-3,4-dione II, starting from Et 5-bromo-1H-indole-2-carboxylate and 4-methylbenzyl bromide, was given. The compound II showed IC50 of 2.3 µM against human PAI-1. pharmaceutical composition comprising the compound I is claimed.

L27 ANSWER 13 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:515481 HCAPLUS

DOCUMENT NUMBER:

TITLE:

141:71442

Preparation of aryl, aryloxy, and alkyloxy substituted 1H-indol-3-yl glyoxylic acid derivatives as inhibitors

of plasminogen activator inhibitor-1 (PAI-1)
Jennings, Lee Dalton; Elokdah, Hassan Mahmoud

; McFarlane, Geraldine Ruth

PATENT ASSIGNEE(S): Wyeth,

SOURCE:

Wyeth, John, and Brother Ltd., USA

PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

INVENTOR(S):

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2004052854
                                          20040624
                                                         WO 2003-US38934
                                                                                       20031209
                                 A2
      WO 2004052854
                                          20040805
                                 A3
                AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
                 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
                 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
                LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ,
           TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE,
                ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
                 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
      US 2004138283
                                 A1
                                         20040715
                                                         US 2003-731308
                                                                                       20031209
PRIORITY APPLN. INFO.:
                                                         US 2002-432329P
                                                                                   P 20021210
OTHER SOURCE(S):
                                MARPAT 141:71442
GI
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$$R^3$$
 R^2
 R^4
 R^5
 R^5
 R^5
 R^5

AB The title compds. [I; R1 = II (wherein R4 = H, halo, alkyl, etc.; X = 0, S, NH; R5 = alkyl, perfluoroalkyl, cycloalkyl, etc.), alkyl, benzo[1,3]dioxol-5-ylmethyl, cycloalkylalkyl, etc.; R2 = H, alkyl, cycloalkyl, etc.; R3 = H, halo, alkyl, etc.], useful as inhibitors of plasminogen activator inhibitor (PAI-1) for treating conditions resulting from fibrinolytic disorders, such as deep vein thrombosis, coronary heart disease and pulmonary fibrosis, were prepared E.g., a 4-step synthesis of III, starting from indole and 4-iodoanisole, which showed 23% PAI-1 inhibition at 25 μM , was given. The pharmaceutical composition comprising the compound I is claimed.

L27 ANSWER 14 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2004:493571 HCAPLUS

DOCUMENT NUMBER:

141:54194

TITLE:

Preparation of substituted indolyloxoacetylaminoacetic acid derivatives as inhibitors of plasminogen

activator inhibitor-1 (PAI-1)

INVENTOR (S): Elokdah, Hassan Mahmoud; McFarlane,

> Geraldine Ruth; Li, David Zenan Wyeth, John, and Brother Ltd., USA

PATENT ASSIGNEE(S): SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

P	PATENT NO.				KIND DATE				2	APPLICATION NO.						DATE			
τ	JS	2004116504			A1 20040617			1	US 2003-731074						20031209				
W	O	2004	4052856			A1 20040624			1	WO 2003-US38933					20031209				
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		•	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	
			NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	
			TM,	TN,	TR,	TT,	TZ,	UA,	ŪĠ,	US,	UΖ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
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			BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	
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			TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG
PRIORI	TY	APP									US 2002-432331P								
OTHER SOURCE(S):				MAR	TAG	141:	5419	4											

GI

$$R^{5}$$
 R^{6}
 $CO_{2}H$
 R^{4}
 R^{2}
 R^{1}
 R^{1}

The title compds. [I; R1 = alkyl, cycloalkyl, CH2(cycloalkyl), pyridinyl, AB CH2(pyridinyl), Ph, CH2Ph; R2 = H, alkyl, cycloalkyl, CH2(cycloalkyl), perfluoroalkyl; R3 = H, halo, alkyl, perfluoroalkyl, alkoxy, cycloalkyl, CH2(cycloalkyl), NH2, NO2; R4 = Ph, CH2Ph, OCH2Ph, pyridinyl, CH2(pyridinyl); R5 = H, alkyl, cycloalkyl, CH2(cycloalkyl), perfluoroalkyl, aryl, alkylaryl; R6 = H, alkyl, hydroxyalkyl, 4-hydroxybenzyl, 3-indolylymethylene, 4-imidazolylmethylene, etc.; or R5 taken together with R6 = CH2CH2CH2] which are inhibitors of plasminogen activator inhibitor-1 (PAI-1) useful for treating fibrinolytic disorders, were prepared E.g., a multi-step synthesis of I [R1 = 4-tert-BuC6H4CH2; R2, R3 = H; R4 = 5-(3-MeC6H4); R5, R6 = H], starting from 5-bromoindole and 4-tert-butylbenzyl bromide, was given. The latter showed IC50 of 29 μM against PAI-1. The pharmaceutical composition comprising the compound I is claimed.

L27 ANSWER 15 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2004:459218 HCAPLUS

DOCUMENT NUMBER: 141:174039

TITLE: Tiplaxtinin, a Novel, Orally Efficacious Inhibitor of

Plasminogen Activator Inhibitor-1: Design, Synthesis,

and Preclinical Characterization

AUTHOR(S): Elokdah, Hassan; Abou-Gharbia, Magid;

Hennan, James K.; McFarlane, Geraldine; Mugford, Cheryl P.; Krishnamurthy, Girija; Crandall, David L.

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research,

Princeton, NJ, 08543, USA

SOURCE: Journal of Medicinal Chemistry (2004), 47(14),

3491-3494

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 141:174039

AB Indole oxoacetic acid derivs. were prepared and evaluated for in vitro binding to and inactivation of human plasminogen activator inhibitor-1 (PAI-1). SAR based on biochem., physiol., and pharmacokinetic attributes led to identification of tiplaxtinin as the optimal selective PAI-1 inhibitor. Tiplaxtinin exhibited in vivo oral efficacy in two different models of acute arterial thrombosis. The remarkable preclin. safety and metabolic stability profiles of tiplaxtinin led to advancing the compound to clin. trials.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 16 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:226448 HCAPLUS

AUTHOR (S):

TITLE: Mechanistic characterization of the interactions of

plasminogen activator inhibitor-1 with a small molecule inhibitor using biophysical methods Krishnamurthy, Girija; Pitts, Keith; Smeltzer,

Claudia; Ellestad, George; Elokdah, Hassan;

Crandall, Dave

CORPORATE SOURCE: Screening Sciences, Wyeth Research, Pearl River, NY,

10965, USA

SOURCE: Abstracts of Papers, 227th ACS National Meeting,

Anaheim, CA, United States, March 28-April 1, 2004

(2004), MEDI-090. American Chemical Society:

Washington, D. C. CODEN: 69FGKM

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

Plasminogen activator inhibitor (PAI-1) is the most important inhibitor of tissue-type plasminogen activator (tPA) and urokinase-type plasminogen activator (uPA). PAI-1, a 50- kDa glycoprotein is a member of the serpin family of inhibitors. It plays a major role in regulating fibrinolysis by inactivating tPA and uPA. PAI-1 is a metastable protein that exists in several distinct conformational states including the loop inserted inactive latent form. We have characterized the interactions of the small mol. inhibitor, WAY-555, with PAI-1 using biophys. methods. Fluorescence binding expts., using NBD-labeled PAI-1 show that the inhibitor binds PAI-1 with an affinity of ca.3 uM. WAY-555 inhibits the interaction of active PAI-1 with tPA due to the formation of cleaved form of PAI-1, as evidenced by the changes in thermal unfolding transitions of PAI-1 isoforms and gel mobility assays. WAY-555 does not induce the inactive latent form of PAI-1 or other polymerized forms of PAI-1. The implications of these findings with respect to the novel mechanism of action of WAY-555 will be discussed.

L27 ANSWER 17 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:226447 HCAPLUS

TITLE: Design, synthesis and SAR of 2-naphthyl benzofurans as

inhibitors of plasminogen activator inhibitor-1

AUTHOR(S): Elokdah, Hassan; McFarlane, Geraldine R.;

Krishnamurthy, Girija; Crandall, David L.

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research,

Princeton, NJ, 08543, USA

SOURCE: Abstracts of Papers, 227th ACS National Meeting,

Anaheim, CA, United States, March 28-April 1, 2004 (2004), MEDI-089. American Chemical Society:

Washington, D. C. CODEN: 69FGKM

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

Plasminogen activator inhibitor-1 (PAI-1) is a major regulatory component of the plasminogen-plasmin system. PAI-1 is the principal physiol. inhibitor of both tissue type plasminogen activator (tPA) and urokinase type plasminogen activator (uPA). Elevated plasma levels of PAI-1 have been associated with thrombotic diseases. Neutralization of PAI-1 resulted in promotion of endogenous thrombolysis. Accordingly, agents that inhibit PAI-1 would be of utility in treating conditions originating from fibrinolytic disorder. High-throughput screening identified a benzoyl benzofuran hit. Subsequent substructure search and testing identified a series of naphthoyl benzofurans as more robust inhibitors of PAI-1. Synthetic efforts around the naphthoyl benzofurans led to the discovery of 2-naphthyl benzofuran series, with more potent in vitro and in vivo profiles, leading to the identification of WAY-164084 as a potent and selective PAI-1 inhibitor. This compound was subsequently advanced to pre-development status. The syntheses and SAR of these compds. as well as the binding properties and the in vivo activity of WAY-164084 in animal models of thrombosis will be presented.

L27 ANSWER 18 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:226446 HCAPLUS

TITLE: Design, synthesis and biological activity of a series

of arylamide-naphthalen-2-yloxy-acidic derivatives as inhibitors of plasminogen activator inhibitor-1 (PAI-1), the major physiological inhibitor of tissue

plasminogen activator (tPA)

AUTHOR(S): Commons, Thomas J.; Croce, Susan; Woodworth, Richard

P.; Trybulski, Eugene J.; Elokdah, Hassan;

Crandall, David L.; Hennan, James; Krishnamurthy,

Girija; Mugford, Cheryl

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research,

Collegeville, PA, 19426, USA

SOURCE: Abstracts of Papers, 227th ACS National Meeting,

Anaheim, CA, United States, March 28-April 1, 2004

(20,04), MEDI-088. American Chemical Society:

Washington, D. C. CODEN: 69FGKM

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB Plasminogen activator inhibitor-1 (PAI-1) is the major physiol. inhibitor of tissue plasminogen activator (tPA), a serine proteinase involved in fibrinolysis. Epidemiol. studies have shown that elevated circulating levels of PAI-1 are associated with coronary heart disease and possibly atherosclerosis. These findings have generated an interest in developing a drug that specifically inhibits PAI-1. Consequently, high throughput

screening (HTS) of our compound bank led to a number of leads that were grouped into eight distinct series. One such series ultimately led to the benzofuran amide A, one of five compds. selected as a Late Stage Discovery compound The SAR leading to A, synthetic routes to various targets and the biol. activity of selected compds. will be discussed.

L27 ANSWER 19 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:226445 HCAPLUS

TITLE: Design and synthesis of novel oxime-based PAI-1

inhibitors

AUTHOR(S): Havran, Lisa M.; Butera, John A.; Jenkins, Douglas;

Elokdah, Hassan; Krishnamurthy, Girija;

Crandall, David L.

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research,

Princeton, NJ, 08543, USA

SOURCE: Abstracts of Papers, 227th ACS National Meeting,

Anaheim, CA, United States, March 28-April 1, 2004 (2004), MEDI-087. American Chemical Society:

Washington, D. C.

CODEN: 69FGKM

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

Plasminogen Activator Inhibitor-1 (PAI-1), a member of the Serine Protease Inhibitor (SERPIN) family, is the most important physiol. inhibitor of tissue-type plasminogen activator (tPA) and urokinase-type plasminogen activator (uPA). Elevated PAI-1 activity is associated with decreased fibrinolysis and increased risk of thrombosis in many chronic and acute disease states. As part of a program to find an orally active small mol. that would normalize plasma PAI-1 activity and reduce thrombotic risk, high throughput screening was completed on the Wyeth chemical library. Several chemical leads were found including a bisphenoxy series exemplified by 1. Patent and stability issues were addressed by the development of a series of oxime based analogs. Benzofuran 2 improves the in vitro potency of previous leads and shows in vivo efficacy at 5 mpk in a clot lysis model. Recent results from this work will be presented.

L27 ANSWER 20 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:226372 HCAPLUS

TITLE: Tiplaxtinin: A novel orally efficacious inhibitor of

PAI-1 for use in treatment of diseases of fibrinolytic

dysfunction

AUTHOR(S): Elokdah, Hassan; McFarlane, Geraldine R.;

Li, David Z.; Butera, John A.; Abou-Gharbia, Magid; Krishnamurthy, Girija; Hennan, James; Friedrichs,

Gregory; Crandall, David L.

CORPORATE SOURCE: Chemical and Screening Sciences, Wyeth Research,

Princeton, NJ, 08543, USA

SOURCE: Abstracts of Papers, 227th ACS National Meeting,

Anaheim, CA, United States, March 28-April 1, 2004

(2004), MEDI-014. American Chemical Society:

Washington, D. C. CODEN: 69FGKM

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

AB The serine protease inhibitor plasminogen activator inhibitor-1 (PAI-1) regulates fibrinolysis through its modulation of plasmin, and increased plasma PAI-1 is associated with diseases of fibrinolytic impairment. PAI-1 is the physiol. inhibitor of both urokinase plasminogen activator (uPA) and tissue plasminogen activator (tPA), and its elevation is associated with clot stabilization in acute thrombosis as well as tissue remodeling

occurring during atherosclerosis and cancer. The central role of plasmin in these diverse diseases suggests that inhibition of PAI-1 has potential therapeutic benefit, yet an orally active PAI-1 inhibitor has not yet been described. We present the discovery of Tiplaxtinin, a novel indole-oxoacetic acid derivative that both binds PAI-1 with high affinity (Kd=480 nM) and exhibits oral efficacy in preclin. models of arterial and venous thrombosis. We also describe the synthesis and structure-activity relationship studies leading to the discovery of Tiplaxtinin, the biol. data predictive of its utility, and the preclin. safety assessment leading to its selection as a clin. candidate.

L27 ANSWER 21 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:1011633 HCAPLUS

DOCUMENT NUMBER: 140:181384

TITLE: Design, Synthesis, and Biological Evaluation of

Thio-Containing Compounds with Serum HDL-Cholesterol-Elevating Properties

AUTHOR(S): Elokdah, Hassan; Sulkowski, Theodore S.;

Abou-Gharbia, Magid; Butera, John A.; Chai, Sie-Yearl; McFarlane, Geraldine R.; McKean, Mar-Lee; Babiak, John

L.; Adelman, Steven J.; Quinet, Elaine M.

CORPORATE SOURCE: Medicinal Chemistry, Wyeth Research, Princeton, NJ,

08543, USA

SOURCE: Journal of Medicinal Chemistry (2004), 47(3), 681-695

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal LANGUAGE: English

AB A novel series of substituted sulfanyldihydroimidazolones that modulates high-d. lipoprotein cholesterol (HDL-C) has been reported to have HDL-elevating properties in several animal models. Concerns about the chemical and metabolic stability of these compds. directed us to explore the structure-activity relationship (SAR) of a related series of substituted thiohydantoins. Expansion of the scope of the thiohydantoin series led to exploration of compds. in related thio-containing ring systems and the N-cyanoguanidine derivative Compds. were tested sequentially in three animal models to assess their HDL-C elevating efficacy and safety profiles. Further evaluation of selected compds. in a dose-response paradigm culminated in the identification of one of the major products as a candidate compound for advanced preclin. studies.

REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 22 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:883121 HCAPLUS

DOCUMENT NUMBER: 140:139089

TITLE: WAY-140312 reduces plasma PAI-1 while maintaining

normal platelet aggregation

AUTHOR(S): Crandall, David L.; Hennan, James K.; Elokdah,

Hassan; Krishnamurthy, Girija; Antrilli, Thomas

M.; Bauer, Jean S.; Morgan, Gwen A.; Swillo, Robert E. Cardiovascular and Metabolic Diseases Research, Wyeth

Research, Collegeville, PA, 19426, USA

SOURCE: Biochemical and Biophysical Research Communications

(2003), 311(4), 904-908

CODEN: BBRCA9; ISSN: 0006-291X

PUBLISHER: Elsevier Science

DOCUMENT TYPE: Journal

LANGUAGE: Sourhai English

CORPORATE SOURCE:

AB Plasminogen activator inhibitor-1 (PAI-1) is the major physiol. inhibitor

of tissue plasminogen activator (tPA) and is elevated in diseases of vascular remodeling. In this study, we describe an inhibitor of active PAI-1, WAY-140312. Using fluorescence spectroscopy, it was determined that WAY-140312 bound PAI-1 at a single binding site with a dissociation constant of 5 $\mu\text{M}.$ In a biochem, assay determining direct tPA activity, human recombinant PAI-1 completely inhibited tPA, but this inhibition was blocked by WAY-140312 at an IC50 of 15.6 $\mu\text{M}.$ In vivo, a 10 mg/kg oral dose of WAY-140312 to rats produced a significant plasma reduction of active PAI-1. Bleeding time, thrombin clotting time, and ex vivo platelet aggregation induced by ADP (20 μM) or collagen (2.5 $\mu\text{g/mL}$) were not affected by administration of WAY-140312. These results are the first to demonstrate that an orally active PAI-1 inhibitor can reduce plasma PAI-1 activity while maintaining normal platelet aggregation and coagulation.

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 23 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:492714 HCAPLUS

DOCUMENT NUMBER: 139:69265

TITLE: Preparation of 1,3-disubstituted-2-thioxoimidazolidine-

4,5-diones as potassium channel openers

INVENTOR(S): Butera, John A.; Elokdah, Hassan M.;

Sulkowski, Theodore S.; Primeau, John L.; Lennox,

Joseph R.

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: U.S. Pat. Appl. Publ., 11 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 2003119890	A1	20030626	US 2002-282540	20021029		
PRIORITY APPLN. INFO.:			US 2001-340921P P	20011030		
OTHER SOURCE(S):	MARPAT	139:69265				

Ι

GI

AB Title compds. (I; R = (branched) alkyl; Ar = Ph, Ph substituted with ≥1 halo, alkyl, alkoxy, alkylthio, alkylamino, cyano, perfluoroalkoxy, heteroaryl), were prepared Thus, 4-cyanophenyl isothiocyanate in THF at room temperature was treated with a solution of 3,3-dimethyl-2-aminobutane in THF and the reaction was stirred overnight at room temperature to afford 96% 1-(4-cyanophenyl)-3-(1,2,2-trimethylpropyl)thiourea. Et chlorooxoacetate was added to a stirring solution of the above thiourea in CH2Cl2 and the resulting mixture was stirred

overnight at room temperature to give 73% 4-[4,5-dioxo-2-thioxo-3-(1,2,2trimethylpropyl)imidazolidin-1-yl]benzonitrile. The latter inhibited contractions in rat bladder strips with IC50 = 3.3 μ M.

L27 ANSWER 24 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:492713 HCAPLUS

DOCUMENT NUMBER: 139:69264

TITLE: Preparation of 1,3-disubstituted-2-thioxoimidazolidine-

4,5-diones for the treatment of atherosclerosis

INVENTOR(S): Elokdah, Hassan M.; Sulkowski, Theodore S.

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: U.S. Pat. Appl. Publ., 9 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003119889	A1	20030626	US 2002-282511	20021029
PRIORITY APPLN. INFO.:			US 2001-341046P P	20011030

OTHER SOURCE(S): MARPAT 139:69264

GΙ

Antiatherosclerotic title compds. (I; R = alkyl, alkenyl, alkynyl, O(CH2)nCO2R'; R' = alkyl; n = 1-3; Ar = Ph, Ph substituted with ≥ 1 halo, alkyl, alkenyl, alkynyl, alkoxy, perfluoroalkyl, perfluoroalkoxy, alkylthio), were prepared Thus, Et chlorooxoacetate was added dropwise to Et 2-[[[(5-chloro-2-methylanilino)carbothioyl]amino]oxy]acetate (preparation given) in methylene chloride the mixture was refluxed 1 h to give Et 2-[[3-(5-chloro-2-methylphenyl)-4,5-dioxo-2-thioxo-1imidazolidinyl]oxy]acetate. The latter at 100 mg/kg orally in rats increased HDL cholesterol by 242%.

L27 ANSWER 25 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:323274 HCAPLUS

139:145710 DOCUMENT NUMBER:

TITLE: Mapping of a Conformational Epitope on Plasminogen

Activator Inhibitor-1 by Random Mutagenesis AUTHOR (S): Gorlatova, Natalia V.; Elokdah, Hassan; Fan,

Kristi; Crandall, David L.; Lawrence, Daniel A. CORPORATE SOURCE:

The Holland Laboratory, Department of Vascular

Biology, American Red Cross, Rockville, MD, 20855, USA

SOURCE: Journal of Biological Chemistry (2003), 278(18),

16329-16335

CODEN: JBCHA3; ISSN: 0021-9258

PUBLISHER: American Society for Biochemistry and Molecular

Biology

DOCUMENT TYPE: Journal LANGUAGE: English

The mechanism for the conversion of plasminogen activator inhibitor-1 (PAI-1) from the active to the latent conformation is not well understood. Recently, a monoclonal antibody, 33B8, was described that rapidly converts PAI-1 to the latent conformation (Verhamme, I., Kvassman, J. O., Day, D., Debrock, S., Vleugels, N., Declerck, P. J., and Shore, J. D. (1999) J. Biol. Chemical 274, 17511-17517). In an attempt to understand this interaction, and more broadly to understand the mechanism of the natural transition of PAI-1 to the latent conformation, we have used random mutagenesis to identify the 33B8 epitope in PAI-1. This site involves at least 8 amino acids scattered over more than two-thirds of the linear sequence that form a compact epitope on the PAI-1 three-dimensional structure. Surface plasmon resonance studies indicate a high affinity interaction between latent PAI-1 and 33B8 that is .apprx.100-fold higher than comparable binding to active PAI-1. Structural modeling results together with surface plasmon resonance anal. of parental and site-directed PAI-1 mutants with disrupted 33B8 binding suggest the existence of a specific PAI-1 intermediate structure that is stabilized by 33B8 binding. These analyses strongly suggest that this intermediate form of PAI-1 has a partial insertion of the reactive center loop into β -sheet A, and together, these data have significant implications for the general serpin mechanism of proteinase inhibition.

REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 26 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:5953 HCAPLUS

DOCUMENT NUMBER: 138:73173

TITLE: Preparation of substituted 2-(2-naphthyl)indoles as

inhibitors of plasminogen activator inhibitor type-1

(PAI-1)

INVENTOR(S): Mayer, Scott Christian; Gundersen, Eric Gould;

Elokdah, Hassan Mahmoud; Crandall, David Leroy

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PA'	TENT	NO.			KIN	D :	DATE		APPLICATION NO. DATE									
WO	2003	0006	84		A1	_	2003	0103	103 WO 2002-US21113 2002063					518				
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		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	
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US	2003																	
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CA	2448	798			AA		2003	0103	(CA 2	002-	2448	798		26	0020	518	
EP	1397	356			A1		2004	0317		EP 2	002-	7468	46		20	0020	518	
		ΑT,																
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BR 2002010504	Α	20040518	BR	2002-10504		20020618
JP 2004534825	T2	20041118	JP	2003-507087		20020618
US 2004266733	A1	20041230	US	2004-894618		20040720
PRIORITY APPLN. INFO.:			US	2001-299651P	P	20010620
			US	2002-171041	A1	20020613
			WO	2002-US21113	W	20020618

OTHER SOURCE(S):

MARPAT 138:73173

GI

AB The title compds. [I; R1-R4 = H, alkyl, alkanoyl, etc.; R5 = H, alkyl, perfluoroalkyl, etc.; R6 = H, alkyl, alkylaryl, etc.; R7 = H, alkyl, alkylaryl, (un) substituted aryl; n = 0-6; A = CO2H, or an acid mimic such as tetrazole, SO3H, PO3H2, tetronic acid, etc.], useful for the treatment of thrombosis or fibrinolytic impairment in a mammal, were prepared E.g., a 7-step synthesis of 1-benzyl-3-pentyl-2-[6-(1H-tetrazol-5-ylmethoxy)-2-naphthyl]-1H-indole, starting from 6-methoxy-2-naphthaldehyde and hexylmagnesium bromide, which showed IC50 of 9.85 μ M against PAI-1 in the antibody assay, was given.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 27 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

3

ACCESSION NUMBER:

2003:5942 HCAPLUS

DOCUMENT NUMBER:

138:73168

TITLE:

Preparation of naphthylbenzofurans as inhibitors of

plasminogen activator inhibitor-1 (PAI-1).

INVENTOR(S):

Elokdah, Hassan Mahmoud; Mcfarlane,

Geraldine Ruth; Mayer, Scott Christian; Crandall,

David Leroy

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 100 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATEN	T NO.			KIND DATE					APPLICATION NO.						DATE		
				-	-									_			
WO 20	030006	71		A1		2003	0103		WO 2	002-1	US19:	231		2	0020	618	
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		LT,															

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PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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                                                                     20020618
     US 2003018067
                          A1
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                                             US 2002-174166
                                                                     20020618
     US 6599925
                          B2
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     EP 1401822
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                                 20040331
                                             EP 2002-747904
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             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
                                 20040622
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                          Α
                                             BR 2002-10532
                                                                     20020618
     JP 2004534824
                          T2
                                 20041118
                                             JP 2003-507076
                                                                     20020618
PRIORITY APPLN. INFO.:
                                             US 2001-299702P
                                                                  Р
                                                                     20010620
                                             WO 2002-US19231
                                                                  W
                                                                     20020618
OTHER SOURCE(S):
                         MARPAT 138:73168
GΙ
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$$R^4$$
 R^3
 $O(CH_2)_{n}CHR^6A$

AB Title compds. [I; R-R3 = H, alkyl, cycloalkyl, cycloalkylmethyl, alkanoyl, halo, OH, (substituted) aryl, heteroaryl, perfluoroalkyl, alkoxy, amino, perfluoroalkoxy; R4 = H, alkyl, perfluoroalkyl, (substituted) aryl, heteroaryl, alkenyl, alkenylaryl, aryl, CH2R5, CH(OH)R5, COR5, CH(SH)R5, G(S)R5; R5 = H, alkyl, perflouroalkyl, (substituted) aryl, heteroaryl, alkenyl, alkenylaryl; R6 = H, alkyl, cycloalkyl, -CH2-cycloalkyl, alkylaryl, aryl, substituted aryl, heteroaryl, or substituted heteroaryl; n = 0-6; A = CO2H, acid mimic], were prepared Thus, 2-[[1-bromo-6-(3-pentanoyl-1-benzofuran-2-yl)-2-naphthyl]oxy]acetonitrile (preparation given), NaN3, and NH4Cl in DMF were heated at 80° for 2 h to give 1-[2-[5-Bromo-6-(1H-1,2,3,4-tetrazol-5-ylmethoxy)-2-naphthyl]-1-benzofuran-3-yl]-1-pentanone. The latter inhibited PAI-1 with IC50 = 7.7 μM. I are useful in treating fibrinolytic disorders such as deep vein thrombosis, coronary heart disease, and pulmonary fibrosis.

Ι

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 28 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:5921 HCAPLUS

DOCUMENT NUMBER:

138:55749

TITLE:

Preparation of 6-arylamido(methyl)-naphthalen-2-yloxy-acetic acid derivatives as inhibitors of plasminogen

activator inhibitor type-1 (PAI-1)

INVENTOR(S):

Commons, Thomas Joseph; Croce, Susan Christman; Woodworth, Richard Page; Trybulski, Eugene John; Elokdah, Hassan Mahmoud; Crandall, David Leroy

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA PCT Int. Appl., 146 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

GI

PA	TENT	NO.			KIN	D	DATE				ICAT		NO.		D	ATE		
WO	2003	0006	49		A1	-	2003	0103					193		2	0020	618	
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		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	ŪG,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
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		CY,	DΕ,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
		BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
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US	2003	0455	60		A1		2003	0306	•	US 2	002-	1705	58		2	0020	513	
US	6589	970			B2		2003	0708										
CA	2450	174			AA		2003	0103		CA 2	002-	2450	174		2	0020	518	
EP	1397	341			A1		2004	0317		EP 2	002-	7465	61		2	0020	518	
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BR	2002	0104	68		Α		2004	0810		BR 2	002-	1046	8		2	0020	518	
JP	2004	5360	91		T2		2004	1202	,	JP 2	003-	5068	53		2	0020	518	
PRIORIT	Y APP	LN.	INFO	.:					1	US 2	0,01-	2996!	52P		P 2	0010	520	
									1	US 2	001-	3086	56P		P 2	0010	730	
									1	WO 2	002-	US19:	193	1	W 2	0020	518	
OTHER S	OURCE	(S):			MARI	TAS	138:	5574	9									

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0 \\
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AB Title compds. I [Ar = Ph, naphthyl, furanyl, etc.; R1 = H, alkyl, Ph, etc.; R2-3 = H, alkyl, Ph, halo, etc.; R4 = CHR5CO2H, CH2tetrazole, etc.; n = 0-1; R5 = H, benzyl] are prepared For instance, ((6-hydroxynaphthalen-2-yl)methyl)ammonium bromide (preparation given) and benzofuran-2-carbonyl chloride were coupled to form the corresponding amide. The intermediate

amide was alkylated with Me bromoacetate (DMF, K2CO3) and the resulting alkylation produce saponified to give II. II at 100 μ M exhibited 25% inhibition of PAI-1. I are useful for the treatment of non-insulin dependent diabetes.

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 29 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:5777 HCAPLUS

DOCUMENT NUMBER:

138:78453

TITLE:

Aryloxy-acetic acid compounds useful as inhibitors of

plasminogen activator inhibitor-1 (PAI-1)

INVENTOR(S):

Elokdah, Hassan Mahmoud

PATENT ASSIGNEE(S):

Wyeth, John, and Brother Ltd., USA

SOURCE:

PCT Int. Appl., 25 pp.

DOCUMENT TYPE:

Patent

CODEN: PIXXD2

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA'	TENT	NO.			KIN	D :	DATE		1	APPL	ICAT	ION I	NO.	. DATE				
WO	2003	0002	58		A1	_	2003	0103	1	WO 2	002 <i>-</i> 1	US19	240		2	0020	618	
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,	
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DΖ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	
		GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,	
		LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,	
		PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,	
		UA,	UG,	UZ,	VN,	YU,	ZA,	ZM,	ZW,	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	ТJ,	TM
	RW:	GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	ŪĠ,	ZM,	ZW,	AT,	BE,	CH,	
		CY,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	
•		BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
US	2003	0137	32		A1		2003	0116	1	JS 2	002-	1710	56		2	0020	513	
PRIORIT	Y APP	LN.	INFO	. :					1	JS 2	001-	2996	59P		P 2	0010	520	
OTHER SO	OURCE	(S):			MAR	TAG	138:	7845	3									
GT																		

AB This invention provides methods of inhibiting plasminogen activator inhibitory (PAI-1) in a mammal, utilizing compds. of the formula (I) wherein: A is C or N; B is O, S, N, or CH=CH; and E is aryl or heterocycle.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 30 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:5772 HCAPLUS

DOCUMENT NUMBER:

138:73172

TITLE:

Preparation of substituted indole-3-acetic acids as

inhibitors of plasminogen activator inhibitor-1

(PAI-1)

INVENTOR(S):

Elokdah, Hassan Mahmoud; Mcfarlane,

Geraldine Ruth; Li, David Zenan; Jennings, Lee Dalton;

Crandall, David Leroy

PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA

SOURCE:

GI

PCT Int. Appl., 110 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

Engil

FAMILI ACC. NOM. COON

PATENT INFORMATION:

PATENT NO.		APPLICATION NO.	DATE
WO 2003000253	A1 20030103	WO 2002-US19344	20020618
W: AE, AG, AL,	AM, AT, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,
CO, CR, CU,	CZ, DE, DK, DM,	DZ, EC, EE, ES, FI,	GB, GD, GE, GH,
GM, HR, HU,	ID, IL, IN, IS,	JP, KE, KG, KP, KR,	KZ, LC, LK, LR,
LS, LT, LU,	LV, MA, MD, MG,	MK, MN, MW, MX, MZ,	NO, NZ, OM, PH,
PL, PT, RO,	RU, SD, SE, SG,	SI, SK, SL, TJ, TM,	TN, TR, TT, TZ,
UA, UG, UZ,	VN, YU, ZA, ZM,	ZW, AM, AZ, BY, KG,	KZ, MD, RU, TJ, TM
RW: GH, GM, KE,	LS, MW, MZ; SD,	SL, SZ, TZ, UG, ZM,	ZW, AT, BE, CH,
CY, DE, DK,	ES, FI, FR, GB,	GR, IE, IT, LU, MC,	NL, PT, SE, TR,
BF, BJ, CF,	CG, CI, CM, GA,	GN, GQ, GW, ML, MR,	NE, SN, TD, TG
US 2003125371	A1 20030703	US 2002-174159	20020618
EP 1397130	A1 20040317	EP 2002-744425	20020618
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR	
JP 2004534817	T2 20041118	JP 2003-506899	20020618
PRIORITY APPLN. INFO.:		US 2001-299657P	P 20010620
		WO 2002-US19344	W 20020618
OTHER SOURCE(S):	MARPAT 138:7317	2	

$$R^3$$
 $X-CO_2H$
 R^2
 R^2
 R^1

AB The title compds. [I; X = a bond, CH2, CO; R1 = alkyl, cycloalkyl, CH2(cycloalkyl), pyridinyl, CH2(pyridinyl), Ph, CH2Ph; R2 = H, alkyl, cycloalkyl, CH2(cycloalkyl), perfluoroalkyl; R3 = H, halo, alkyl, perfluoroalkyl, alkoxy, cycloalkyl, CH2(cycloalkyl), NH2, NO2; R4 = (un)substituted Ph, CH2Ph, OCH2PH, pyridinyl, CH2(pyridinyl)] or their salts or ester forms, useful as inhibitors of plasminogen activator inhibitor-1 (PAI-1) for treating conditions resulting from fibrinolytic disorders such as deep vein thrombosis and coronary heart disease, and pulmonary fibrosis, were prepared E.g., a 4-step synthesis of I [X = CO; R1 = Me; R2-R3 = H; R4 = 6-[4-(trifluoromethoxy)phenyl]], starting from 6-bromo-1H-indole and 4-trifluoromethoxyphenylboronic acid, which showed 15% inhibition of PAI-1 at 25 μM, was given.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 31 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:510506 HCAPLUS

DOCUMENT NUMBER: 138:180405

TITLE: Novel human metabolites of the angiotensin-II

antagonist tasosartan and their pharmacological

effects

AUTHOR(S): Elokdah, Hassan M.; Friedrichs, Gregory S.;

Chai, Sie-Yearl; Harrison, Boyd L.; Primeau, John;

Chlenov, Michael; Crandall, David L.

CORPORATE SOURCE: Chemical Sciences, Medicinal Chemistry, Wyeth

Research, Princeton, NJ, 08543, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2002),

12(15), 1967-1971

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Three novel metabolites of the angiotensin-II (A-II) receptor antagonist tasosartan have been identified in humans, and the syntheses and pharmacol. profiling of these metabolites are reported. Each metabolite bound the human A-II receptor with IC50s between 20 and 45 nM. The in vivo effects of these compds. in attenuating the pressor response to angiotensin-II challenge in anesthetized rats were also investigated. An unsatd. diol metabolite exhibited in vivo efficacy at i.v. doses of 1 and 3 mg/kg, while the other metabolites, both carboxylic acids, had no

significant effect at the same doses.

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 32 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:392236 HCAPLUS

DOCUMENT NUMBER: 136:386134

TITLE: Preparation of imidazo-isoquinolin-5-ones,

pyrimido-isoquinolin-6-ones and imidazo-naphthyridin-5-

P 20001002

ones as antiatherosclerotics

INVENTOR(S): **Blokdah**, **Hassan M.**; Sulkowski, Theodore S.;

Chai, Sie-Yearl; Babiak, John

PATENT ASSIGNEE(S): American Home Products Corporation, USA; Wyeth

SOURCE: U.S. Pat. Appl. Publ., 8 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2002061900 A1 20020523 US 2001-965957 20010928
US 6448255 B2 20020910

PRIORITY APPLN. INFO.: US 2000-237304P

OTHER SOURCE(S): MARPAT 136:386134

GI

AB The title compds. [I; R = H, alkyl, alkenyl, alkynyl, (un)substituted (hetero)aryl; D = CH, carbon bound to R5, N; R1-R4 = H, alkyl, or taken together form a ring; R5 = H, alkyl, alkenyl, alkynyl, aryl, hydroxy, alkoxy, perfluoroalkyl, perfluoroalkoxy, alkylthio, NO2, NH2, mono or di-alkylamino, halo; n = 0-3] which increase HDL cholesterol concns., were prepared Thus, reacting 1-(4-fluorophenyl)-3-oxo-1,3-dihydro-isobenzofuran-1-carboxamide (preparation given) with 2-methyl-1,2-diaminopropane in PhMe afforded II which showed 90% HDL cholesterol level increase in blood serum at 100 mg/kg/day.

L27 ANSWER 33 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

Ι

ACCESSION NUMBER:

2002:294263 HCAPLUS

DOCUMENT NUMBER:

136:309767

TITLE:

Preparation of amino thioxomethyl amino oxyacetic acid

derivatives as antiatherosclerotics

INVENTOR (S):

Elokdah, Hassan M.; Sulkowski, Theodore S. American Home Products Corporation, USA

PATENT ASSIGNEE(S);

U.S. Pat. Appl. Publ., 9 pp.

SOURCE:

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 2002045776	A1	20020418	US 2001-965898		20010928
US 6472430	B2	20021029			
PRIORITY APPLN. INFO.:			US 2000-237466P	P	20001002
OTHER SOURCE(S):	MARPAT	136:309767			
GI					

AB The title compds. ArNHC(:S)NROCR2R3COR1 [R = alkyl; R1 = OH, NH2, alkoxy;

R2, R3 = H, alkyl, aryl; Ar = (un)substituted Ph, indanyl, benzhydryl], useful as antiatherosclerotics, were prepared Thus, reacting 5-chloro-2-methylphenyl isothiocyanate with Et N-methylaminooxyacetate (preparation given) in ether afforded I which showed 118% HDL cholesterol increase at 100 mg/kg in rats.

L27 ANSWER 34 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2002:275976 HCAPLUS

DOCUMENT NUMBER:

136:309940

TITLE:

Preparation of 3-thioxo[1,2,4]oxadiazinan-5-ones as

antiatherosclerotic agents

INVENTOR(S):

Elokdah, Hassan Mahmoud; Sulkowski, Theodore

Sylvester

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 28 pp.

DOCUMENT TYPE:

Patent

CODEN: PIXXD2

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.				KIND DATE				APPL	ICAT	ION :	NO.	DATE				
WO 20	0020288	 45		A1	-	2002	0411		WO 2	001-	US30	588		2	0010	928
V	V: AE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JΡ,	ΚE,	KG,	ΚP,	KR,	KZ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,	TR,	TT,	TZ,	UA,	UG,
	UZ,	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM		
F	RW: GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,
	DE,	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,
	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG	
AU 20	010949	10		A5		2002	0415		AU 2	001-	9491	0		2	0010	928
US 20	020618	83		A1		2002	0523	1	US 2	001-	9658	74		2	0010	928
US 65	62814			B2		2003	0513									
PRIORITY A	APPLN.	INFO	. :					1	US 2	000-	2374	68P		P 2	0001	002
								1	WO 2	001-	US30	588	1	W 2	0010	928
OTHER SOIL	CE (C) .			МλЪї	ידעכ	126.	2000	10								

OTHER SOURCE(S): GΙ

MARPAT 136:309940

The title compds. [I; R = alkyl, alkenyl, alkynyl; R1, R2 = H, alkyl, AB aryl; Ar = (un)substituted Ph, indanyl, benzhydryl] that elevate HDL cholesterol concentration, and which may be useful for the treatment of atherosclerotic conditions such as coronary heart disease, were prepared Thus, reacting 4-chloro-2-methylphenyl isothiocyanate with N-methylaminoxyacetic acid hydrochloride (preparation given) in the presence of Et3N in CHCl3 followed by cyclizing the resulting acid with PCl5 in C6H6 afforded I [R = Me; R1, R2 = H; Ar = 4-chloro-2-methylphenyl], which

produced a 221% HDL cholesterol increase at 100 mg/kg/day.

REFERENCE COUNT: THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS 3

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 35 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:640782 HCAPLUS

TITLE: Design and synthesis of thioxo-imidazolidinediones and

derivatives as high density lipoprotein cholesterol

(HDL-C) enhancers

AUTHOR (S): Elokdah, Hassan; Sulkowski, Theodore; Chai,

Sie-Yearl; McFarlane, Geraldine R.; Butera, John A.;

McKean, Mar-Lee; Quinet, Elaine

CORPORATE SOURCE: Chemical Sciences, Wyeth-Ayerst Research, Princeton,

NJ, 08543, USA

SOURCE: Abstracts of Papers, 222nd ACS National Meeting,

Chicago, IL, United States, August 26-30, 2001 (2001), ORGN-419. American Chemical Society: Washington, D.

C.

CODEN: 69BUZP

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

Epidemiol. studies have revealed trends correlating the elevation of high d. lipoprotein cholesterol (HDL-C), with decreased incidence of atherosclerosis and coronary heart disease (CHD). Functionally, HDL-C acts as a transporter of cholesterol from the peripheral tissues to the liver where it is catabolized and excreted. Thus, agents that increase HDL-C should be useful therapuetics for the treatment of atherosclerosis and CHD. A series of 2-substituted-sulfanyl-3,5-dihydro-imidazole-4-ones (1) and 2-substituted-sulfanyl-1H-imidazole-4,5-diones were prepared and were shown to increase high d. lipoprotein cholesterol over other lipid fractions. Compds. of this class were show to be extensively metabolized. Synthesis and structure assignment of a major metabolite of the ethyl-sulfanyl lead will be reported. Concerns about the chemical and metabolic stability of these classes of compds. directed our efforts to a related series of substituted thiohydantoin derivs. (2). These compds. were also effective in raising HDL-C over other lipid fractions and offered improved stability and metabolic profiles. However, the detection of a thiourea metabolite prompted us to investigate systems with potentially different metabolic fates such as substituted thiouracil, substituted thiopiperazinone, and substituted 3-thioxo-[1,2,4]-oxadiazinan-5-one (3). Synthesis and structure activity relationship (SAR) of these series derivs. will be discussed.

L27 ANSWER 36 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:118615 HCAPLUS

DOCUMENT NUMBER: 134:326486

TITLE: Design and synthesis of tricyclic derivatives as high

density lipoprotein cholesterol enhancers Elokdah, H.; Chai, S.-Y.; Ho, D.; Sulkowski,

AUTHOR (S):

CORPORATE SOURCE:

Chemical Sciences, Wyeth-Ayerst Research, Princeton,

NJ, 08543, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2001),

11(3), 339-342

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 134:326486

A pharmacophore for increasing HDLC was proposed based on common

structural features of non-thio-containing compds. with HDLC enhancing properties. A search of the compound database identified various series of these non-thio-containing compds., including a novel tricyclic imidazoisoquinolinone. Preparation of 1-aryl-3-oxo-1,3-dihydro-2-benzofuran-1-carboxamides using a novel and widely applicable one-step process from 2-acylbenzoic acids is reported. Reaction of diamines with 1-aryl-3-oxo-1,3-dihydro-2-benzofuran-1-carboxamides and related aza-analogs proceeded regioselectively to furnish imidazoisoquinolinones, pyrimidoisoiquinolinones and imidazonaphthyridines. Compds. of these series increased concns. of HDLC in test animals following oral administration.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 37 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:565879 HCAPLUS

DOCUMENT NUMBER: 133:329355

TITLE: Effects of 2-(substituted-sulfanyl)-3,5-dihydro-

imidazole-4-one and 2-(substituted-sulfanyl)-1H-

imidazole-4,5-dione derivatives on serum

HDL-cholesterol

AUTHOR(S): Elokdah, H.; Sulkowski, T.; Cochran, D.;

McKean, M.-L.; Quinet, E.

CORPORATE SOURCE: CN 8000, Chemical Sciences, Medicinal Chemistry,

Wyeth-Ayerst Research, Princeton, NJ, 08543, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2000),

10(16), 1791-1794

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: Bodilian

GI

AB A series of 2-substituted sulfanyl-3,5-dihydro-imidazole-4-ones and 2-substituted sulfanyl-1H-imidazole-4,5-diones was prepared and shown to increase high d. lipoprotein cholesterol over other lipid fractions. Compound (I) showed efficacy in addnl. animal models. The major metabolite of I was isolated and its synthesis is reported. The effects of the metabolite on the lipid profile in rats were investigated.

REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 38 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:617406 HCAPLUS

TITLE: Benzylamino analogs of 1,2-diaminocyclobutene-3,4-

dione as novel KATP-channel openers targeted for

treatment of urge urinary incontinence.

McFarlane, Geraldine R.; Gundersen, Eric G.; Elokdah, Hassan; Herbst, David R.; Antane, AUTHOR (S):

Madelene M.; Hirth, Bradford H.; Butera, John A.; Graceffa, Russell F.; Quagliato, Dominick A.; Matelan,

Edward; Gilbert, Adam M.; Francisco, Gerardo P.;

Argentieri, Thomas; Norton, N. Wesley; Warga, Dawn M.; Sheldon, Jeffery; Wojdan, Alexandra; Freeden, Chris;

Woods, Morgan

CORPORATE SOURCE: Chemical Sciences, Wyeth-Ayerst Research, Princeton,

NJ, 08543-8000, USA

SOURCE: Book of Abstracts, 218th ACS National Meeting, New

Orleans, Aug. 22-26 (1999), MEDI-035. American

Chemical Society: Washington, D. C.

CODEN: 67ZJA5

DOCUMENT TYPE: Conference; Meeting Abstract

LANGUAGE: English

Diverse number of potassium channels have been described in the literature. Of these the ATP-sensitive potassium channel (K channel) has been targeted and modulated for the regulation of a wide range of physiol. processes, among which is the mediation of smooth muscle cell contractility. K channel activators (KCAs)/openers (KCOs) induce hyperpolarization of cell membranes leading to smooth muscle cell relaxation. A variety of structurally diverse KCOs have been reported. A bladder selective KCO can potentially alleviate bladder instability and may be useful for the treatment of urge urinary incontinence (UUI) without concomitant hemodynamic effects. Replacement of the N-cyanoguanidine moiety of Pinacidil (1) with a 1,2-diaminocyclobutenedione (squarate diamine) led us to the identification of a series of N-aryl-N"-alkyl diamino squarates (2) as bladder selective KCOs. To further improve the metabolic stability of this class of compds., a series of N-benzyl-N"-alkyl diamino squarates (3) were prepared and were found to be potent and bladder selective KCOs. The synthesis, SAR, and activity of selected agents will be presented.

L27 ANSWER 39 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:521438 HCAPLUS

DOCUMENT NUMBER: 131:144521

TITLE: Preparation of 2-substituted-1-acyl-1,2-

> dihydroquinolines with high-density lipoprotein cholesterol-elevating and antiatherosclerotic

properties

INVENTOR(S): Babiak, John; Elokdah, Hassan Mahmoud;

Miller, Christopher Paul; Sulkowski, Theodore

Sylvester

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

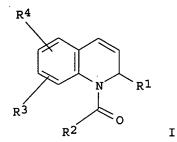
FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. ---------_____ -----US 5939435 19990817 US 1998-15178 19980129 PRIORITY APPLN. INFO.: US 1997-37409P P 19970203

OTHER SOURCE(S): CASREACT 131:144521; MARPAT 131:144521

GT



AB 2-Substituted-1-acyl-1,2-dihydroquinolines [I; R1 = CONH2, C(:NOH)NH2; R2 = (un)substituted Ph; R3, R4 = H, halogen, C1-6 alkyl, CF3], useful for increasing high d. lipoprotein cholesterol (HDL-cholesterol) concns. and for treating atherosclerotic conditions such as dyslipoproteinemias and coronary heart disease, are prepared Thus, quinoline was reacted with benzoyl chloride in the presence of AlCl3 and cyanated with Me3SiCN, producing 1-(benzoyl)-1,2-dihydroquinoline-2-carbonitrile, which was dissolved in acetone and reacted with sodium bicarbonate and 30% hydrogen peroxide, producing 1-(benzoyl)-1,2-dihydroquinoline-2-carboxamide (m.p. 169-171°), which demonstrated a 139% increase in the HDL-cholesterol level in the blood of rats when administered at 100 mg/kg

per day (p.o.).
REFERENCE COUNT:

6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 40 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:152316 HCAPLUS

DOCUMENT NUMBER:

130:196654

TITLE:

Preparation of 2-(substituted sulfanyl)-3,5-dihydro-

imidazol-4-ones for increasing HDL blood levels

INVENTOR(S):

Elokdah, Hassan M.; Sulkowski, Theodore S.;

Strike, Donald P.

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

U.S., 8 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

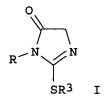
English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-			
US 5877324	Α	19990302	US 1996-754441	19961121
PRIORITY APPLN. INFO.:			US 1996-754441	19961121
OTHER SOURCE(S):	МАРРАТ	130 - 196654		

· GI



AB The title compds. [I; R = Ph or Ph optionally substituted with one or more groups selected from halo, alkyl, perfluoroalkyl, etc.; R3 = alkyl, aryl, arylalkyl] and their pharmaceutically acceptable salts, useful for increasing HDL blood levels, were prepared Thus, reaction of glycinamide with 4-fluorophenyl isothiocyanate followed by refluxing the resulting 2-[3-(4-fluorophenyl)thioureido]acetamide with EtI in EtOH afforded I [R = 4-FC6H4; R3 = Et] which showed 140% HDL cholesterol level increase at 80 mg/kg/day in 8 days treatment.

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 41 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:53401 HCAPLUS

DOCUMENT NUMBER:

130:139338

TITLE:

Preparation of 2-thioxo-imidazolidin-4-one derivatives

for increasing blood serum HDL levels

INVENTOR(S):

Elokdah, Hassan M.; Chai, Sie-Yearl;

PATENT ASSIGNEE(S):

Sulkowski, Theodore S.; Strike, Donald P. American Home Products Corporation, USA

U.S., 8 pp.

SOURCE:

CODEN: USXXAM

DOCUMENT TYPE:

Patent

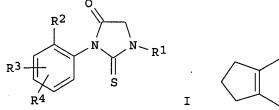
LANGUAGE:

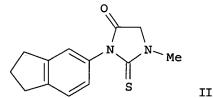
English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
US 5861517	A	19990119	US 1996-749367	19961121
PRIORITY APPLN. INFO.:			US 1996-749367	19961121
OTHER SOURCE(S):	MARPAT	130:139338		
CT				





AB The title compds. [I; R1 = C1-6 alkyl, C2-6 alkenyl; R2 = C1-6 alkyl and R3, R4 = H, C1-6 alkyl; or R2 = H and R3R4 = ortho substituted

trimethylene or tetramethylene], useful for increasing blood serum HDL levels, were prepared Thus, reaction of sarcosine Et ester hydrochloride with indan-5-yl isothiocyanate in the presence of Et3N in CHCl3 afforded II which showed 112% HDL cholesterol level increase at 100 mg/kg.

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 42 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:668042 HCAPLUS

DOCUMENT NUMBER: 129:302638

TITLE: Preparation of 2-thioxo-imidazolidin-4-ones for

increasing blood serum HDL levels
VENTOR(S): Flokdah, Hassan M.: Chai Sie-Vearl:

INVENTOR(S): Elokdah, Hassan M.; Chai, Sie-Yearl; Sulkowski, Theodore S.; Strike, Donald P.

PATENT ASSIGNEE(S): American Home Products Corp., USA

SOURCE:

U.S., 7 pp.

DOCUMENT TYPE:

CODEN: USXXAM

LANGUAGE:

Patent

DANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
				
US 5821372	Α	19981013	US 1996-754451	19961121
PRIORITY APPLN. INFO.:			US 1996-754451	19961121
OTHER SOURCE(S):	MARPAT	129:302638	·	

GI

$$R^2$$
 N
 R^1
 R^4
 N
 R^1

The title compds. [I; R1 = C1-6 alkyl, C2-6 alkenyl, C6-10 aryl, C7-12 arylalkyl; R2 = C1-6 alkyl; R3 = halo; R4 = H; or R1 = C1-6 alkyl, allyl, Ph; R2 C1-3 alkyl; R3 = Cl; R4 = H], useful for increasing blood serum HDL levels, were prepared Thus, reaction of N-ethylglycine (preparation described) with 2-chloro-6-methylphenyl isothiocyanate in the presence of Et3N in CH2Cl2 afforded I [R1 = Et; R2 = Cl; R3 = 6-Me; R4 = H] which showed 222 % HDL cholesterol level increase.

REFERENCE COUNT:

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 43 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

38

ACCESSION NUMBER:

1998:604660 HCAPLUS

DOCUMENT NUMBER:

129:245160

TITLE:

Preparation of 2-thioxo-tetrahydropyrimidin-4-ones for

treating atherosclerotic conditions

INVENTOR(S):

Chai, Sie-Yearl; Elokdah, Hassan M.;

Sulkowski, Theodore S.

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

U.S., 7 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

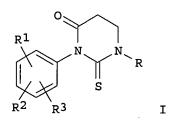
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE -----**----**-----_____ US 5807864 Α 19980915 US 1997-807164 19970227 US 1997-807164 19970227

PRIORITY APPLN. INFO.: OTHER SOURCE(S):

MARPAT 129:245160

GI



The title compds. [I; R = C1-6 alkyl, C2-6 alkenyl, C2-6 alkynyl; R1-R3 = H, halo, lower alkyl], which increase HDL cholesterol concentration and are useful in treating atherosclerotic conditions such as dyslipoproteinemias and coronary heart disease, were prepared Thus, reaction of 3-ethylaminopropionic acid with 2,6-dimethylphenyl isothiocyanate in the presence of Et3N in CH2Cl2 followed by treatment of a solution of the resulting 3-[3-(2,6-dimethylphenyl)-1-ethylthioureido]propionic acid in Me2CO with concentrate HCl afforded I [R = Et; R1 = 2-Me; R2 = 6-Me; R3 = H] which showed 184% HDL cholesterol level increase at 100 mg/kg/day (8 days treatment).

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 44 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1998:543054 HCAPLUS

DOCUMENT NUMBER:

129:136105

TITLE:

Preparation of 2-substituted-1-acyl-1,2-dihydroquinoline derivatives to increase

HDL-cholesterol level.

INVENTOR(S):

Babiak, John; Elokdah, Hassan Mahmoud;

Miller, Christopher Paul; Sulkowski, Theodore

Sylvester

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 18 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
		-		
WO 9833775	A1	19980806	WO 1998-US77	19980102

AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9857310 **A1** 19980825 AU 1998-57310 19980102 ZA 9800834 Α 19990802 ZA 1998-834 19980202 PRIORITY APPLN. INFO.: US 1997-794692 Α 19970203 WO 1998-US77 W 19980102 OTHER SOURCE(S): MARPAT 129:136105

GI

AB Title compds. [I; R1 = CONH2, C(:NOH)NH2; R2 = (halo-, alkyl-, or perfluoroalkoxy-substituted) Ph; R3, R4 = H, halo, alkyl, CF3; with provisos], were prepared Thus, quinoline, PhCOCl, and AlCl3 were stirred 10 min. in CH2Cl2; Me3SiCN was added dropwise and the mixture was stirred 4 h to give 1-benzoyl-1,2-dihydroquinoline-2-carbonitrile. The latter in acetone was treated with NaHCO3 and H2O2 to give 1-benzoyl-1,2-dihydroquinoline-2-carboxamide. The latter at 100 mg/kg/day orally in rats for 8 days increased HDL levels by 139%.

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 45 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

2

ACCESSION NUMBER:

1998:493266 HCAPLUS

DOCUMENT NUMBER:

129:136167

TITLE:

Preparation of 2-thioxoimidazolidin-4-one derivatives

for increasing serum HDL levels. Elokdah, Hassan M.; Chai, Sie-Yearl;

Sulkowski, Theodore S.; Strike, Donald P. American Home Products Corporation, USA

PATENT ASSIGNEE(S): SOURCE:

INVENTOR(S):

U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5783707	Α	19980721	US 1996-754440	19961121
PRIORITY APPLN. INFO.:			US 1996-754440	19961121
OTHER SOURCE(S):	MARPAT	129:136167		

GΙ

AB Title compds. (I; R1 = alkyl; R = alkyl, naphthyl, benzhydryl, fluorophenylmethyl, phenethyl, 1-(fluorophenyl)ethyl, 5-chloro-2methoxyphenyl, trifluoromethoxyphenyl, trifluoromethylphenyl, methylsulfanylphenyl, pyridyl), were prepared Thus, N-ethylglycine, 4-trifluoromethoxyphenyl isothiocyanate, and Et3N were refluxed in CH2Cl2 to give 1-ethyl-2-thioxo-3-(4-trifluoromethoxyphenyl)imidazolidin-4-one. The latter at 100 mg/kg orally in rats increased HDL cholesterol by 265%. REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 46 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1998:397789 HCAPLUS

DOCUMENT NUMBER:

129:58784

TITLE:

Use of 2-substituted benzimidazoles as smooth muscle

cell proliferation inhibitors

INVENTOR (S):

Elokdah, Hassan M.; Chai, Sie-Yearl;

Sulkowski, Theodore S.

PATENT ASSIGNEE(S):

American Home Products Corp., USA

SOURCE:

U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5763473	Α	19980609	US 1996-761694	19961206
TW 390876	В	20000521	TW 1996-85106313	19960528
PRIORITY APPLN. INFO.:			US 1996-761694 A	19961206
OTHER SOURCE(S):	MARPAT	129:58784		

The title compds. are effective for inhibiting platelet-derived growth factor-stimulated vascular smooth muscle cell proliferation. 1-(3,4-Dichlorobenzyl)-2-pyridin-2-yl-1H-benzimidazole (I) was prepared by treating 2-pyridin-2-yl-1H-benzimidazole with 3,4-dichlorobenzyl bromide. I was in vitro tested for antiproliferative activities using porcine aortic smooth muscle cells.

REFERENCE COUNT: THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 47 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

11

ACCESSION NUMBER:

1997:618077 HCAPLUS

DOCUMENT NUMBER:

127:278205

TITLE:

Preparation of 2-thioxotetrahydropyrimidin-4-ones for

treating atherosclerotic conditions

INVENTOR (S):

Chai, Sie-Yearl; Elokdah, Hassan Mahmoud;

Sulkowski, Theodore Sylvester

PATENT ASSIGNEE(S):

American Home Products Corp., USA

SOURCE:

PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	NO.														
	855													9970:	
	AL, AM,													DK.	EE.
	ES, FI,														
	LT, LU,														
	SE, SG,														
	KZ, MD,				,	,	,	,	,	,	,	,	,	,	
RW:	KE, LS,		•		UG.	AT.	BE.	CH.	DE.	DK.	ES.	FT.	FR.	GB.	GR.
	IE, IT,												-	-	
	MR, NE,				,	,	,	,	,	,	,	,	J.,	021 ,	,
CA 2247	933	•	•		9970	912	(CA 1	997-	2247	933		1	9970:	212
	237													9970:	
	32										•		_		
	97							EP 1	997-	9065	83		1	9970:	212
	AT, BE,														
	SI, LT,				,	,		,	,	,	,	,	,	,	,
CN 1217	715				9990	526	(CN 1	997-	1943	35		1:	9970:	212
	310								997-					9970:	
JP 2000	507926		T2	2	0000	627			997-					9970	212
TW 4228	507926 40		В	2	0010	221	-		997-					9970	
	911					907			997-					9970:	305
PRIORITY APP									996-						
									997-1						
OTHER SOURCE	(S):		MARF	PAT 1	27:2	7820					_				-

 R^1 N R R^2 R^3

I

The title compds. [I; R = C1-6 alkyl, C2-6 alkenyl; R1-R3 = H, halo, lower alkyl], useful for increasing HDL cholesterol concentration and for treating atherosclerotic conditions such as dyslipoproteinemias and coronary heart disease, were prepared Thus, treatment of 3-chloropropionic acid with aqueous EtNH2 followed by reaction of the resulting 3-ethylaminopropionic acid with 2,6-dimethylphenyl isothiocyanate in the presence of Et3N in CH2Cl2, and treatment of 3-[3-(2,6-dimethylphenyl)-1-ethyl-thioureido]propionic acid with concentrate HCl in Me2CO afforded I [R = Et; R1 = 2-Me; R2 = H; R3 = 6-Me] which showed 184% HDL cholesterol level increase.

L27 ANSWER 48 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:599318 HCAPLUS

DOCUMENT NUMBER:

127:248113

TITLE:

Preparation of 2-thioxoimidazolidin-4-one derivatives and their activity in increasing blood serum HDL

levels

INVENTOR(S): Elokdah, Hassan M.; Chai, Sie-yearl;

Sulkowski, Theodore S.; Strike, Donald P.

PATENT ASSIGNEE(S):

American Home Products Corp., USA

SOURCE:

U.S., 5 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

FAMILY ACC. NUM. COUNT:

English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5663363	A	19970902	US 1996-754449	19961121
PRIORITY APPLN. INFO.:			US 1996-754449	19961121

OTHER SOURCE(S):

MARPAT 127:248113

AB The title compds. I (R = alkynyl; X, Y = alkyl, halo, perfluoroalkyl, perfluoroalkoxy; XY = ortho-substituted trimethylene or tetramethylene) were prepared and found to be useful for increasing blood serum HDL levels. E.g., reaction of BrCH2CO2Et and propargylamine gave Et (propargylamino) acetate, which was reacted with 2,6-C6H3NCS to give I (R = propargyl; X = 2-Me; Y = 6-Me) (II). II increased HDL cholesterol concentration

345% in a standard test.

L27 ANSWER 49 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:476253 HCAPLUS

DOCUMENT NUMBER:

INVENTOR (S):

127:95279

TITLE:

Preparation of 2-(substituted sulfanyl)-3,5-dihydro-

imidazol-4-ones for increasing HDL blood levels Elokdah, Hassan Mahmoud; Sulkowski, Theodore

Sylvester; Strike, Donald Peter

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 28 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9719931	A1	19970605	WO 1996-US19108	19961125
W: AL, AU, BB,	BG, BR	, CA, CN,	CZ, EE, GE, HU, IL, IS,	JP, KP, KR,
LK, LR, LT,	MG, MK	, MN, MX,	NO, NZ, PL, RO, SG, SI,	SK, TR, TT,
			KZ MD DII T.T TM	

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG US 5599829 Α 19970204 US 1995-563841 19951128 AU 9710634 **A1** 19970619 AU 1997-10634 19961125 EP 876354 A1 19981111 EP 1996-941513 19961125 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, FI, RO JP 2000514401 Т2 20001031 JP 1997-520711 19961125 PRIORITY APPLN. INFO.: US 1995-563841 A 19951128 US 1995-7653P Þ 19951128 WO 1996-US19108 W 19961125 OTHER SOURCE(S): CASREACT 127:95279; MARPAT 127:95279 GI

R N N SR3 I

AB The title compds. [I; R = (un)substituted Ph; R3 = C1-6 alkyl, C6-10 aryl, C7-12 arylalkyl] and their salts, useful for increasing HDL blood levels in mammals, were prepared Thus, reaction of 4-fluorophenyl isothiocyanate with glycinamide in CHCl3 followed by cyclization of 2-[3-(4-fluorophenyl)thioureido]acetamide with EtI in EtOH afforded I [R = 4-FC6H4; R3 = Et] which showed 140% increase of HDL cholesterol level at 80 mg/kg/day after 8 days of treatment of male Sprague-Dawley rats.

L27 ANSWER 50 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:473697 HCAPLUS

DOCUMENT NUMBER: 127:81453

TITLE: Preparation of 2-thioxo-imidazolidin-4-ones for

increasing HDL cholesterol concentration

INVENTOR(S): Elokdah, Hassan Mahmoud; Chai, Sie-Yearl;

Sulkowski, Theodore Sylvester; Strike, Donald Peter

PATENT ASSIGNEE(S): American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 52 pp. CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT	NO.			KIN	D 1	DATE			APPL	ICAT:	ION I	NO.		Di	ATE	
					-											
WO 9719	932			A1		1997	0605		WO 1.	996-1	US19	164		1	9961	125
W:	AL,															
	KΡ,	KR,	LC,	LK,	LR,	LT,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	RO,	SG,	SI,
		TR,														
RW:	KE,	LS,	MW,	SD,	SZ,	ŪĠ,	ΑT,	ΒE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,
	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	ML,
	MR,	ΝE,	SN,	TD,	TG											
US 5554	607			Α		1996	0910	1	US 1:	995-	5633	25		19	9951	128
TW 4181	.95			В	:	2001	0111		TW 1:	996-	8510	4367		19	9960	412

TW	46790	3			В		2001	1211	T	W	1996-	8510	04368		1	9960	412
AU	97112	76			A1		1997	0619	A	U	1997-	112	76		1	9961	125
EP	87635	5			A1		1998	1111	E	P	1996-	942	118		1	9961	125
	R: .	ΑT,	BE,	CH,	DE,	DK,	, ES,	FR,	GB,	GR	, IT,	LI	, LU,	NL,	SE,	PT,	IE,
		SI,	LT,	LV,	FΙ,	RO	`										
JP	20005	0110	0		T2		2000	0202	J	Ρ	1997-	520	724		1	9961	125
PRIORITY	APPL	N. I	NFO.	. :					U	S	1995-	5633	325	7	A 1	9951	128
									U	S	1995-	7654	4 P]	2 1	9951	128
									U.	S	1995-	7658	BP]	2 1	9951	128
									U	S	1995-	766:	1P	1	? 1	9951	128
									U	S	1995-	7665	5P]	? 1	9951	128
									U	S	1995-	7666	5 P	1	? 1	9951	128
									W	0	1996-	US19	9164	7	V 1	9961	125
OTHER SO	URCE (s):			MARE	TA	127:	81453	3								

GI

AB The title compds. [I; R = C1-6 alkyl, (un) substituted aromatic heterocyclyl containing N, O or S atoms, (un) substituted aryl, etc.; R1 = (un) substituted C6-10 aryl, alkyl, alkenyl, alkynyl], useful for increasing the HDL cholesterol concentration in the blood of a mammal, were prepared Thus, reaction

of sarcosine Et ester hydrochloride with 5-chloro-2-methylphenyl isothiocyanate in the presence of Et3N in CHCl3 afforded I [R = 5-chloro-2-methylphenyl; R1 = Me] which showed 159% increase of HDL cholesterol level at 100 mg/kg.

L27 ANSWER 51 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:116576 HCAPLUS

DOCUMENT NUMBER: 126:131460

TITLE: Preparation of 2-substituted benzimidazoles as smooth

muscle cell proliferation inhibitors

INVENTOR(S): Elokdah, Hassan Mahmoud; Sie-Yearl, Chai;

Sulkowski, Theodore Sylvester

PATENT ASSIGNEE(S): American Home Products Corporation, USA

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
WO 9640644	A1 19961219	WO 1996-US8374	19960603
W: AL, AM, AU,	BB, BG, BR, CA,	CN, CZ, EE, FI, GE, H	łU, IS, JP, KG,
		MG, MK, MN, MX, NO, N	
		VN, AM, AZ, BY, KG, F	
		BE, CH, DE, DK, ES, F	
IE, IT, LU,	MC, NL, PT, SE,	BF, BJ, CF, CG, CI, C	CM. GA. GN. ML.

	MR,	ΝE,	SN,	TD,	TG												
US	5654436	•		Α		1997	0805	U	JS	1995-	4778	42			199	9506	507
TW	386993			В	:	2000	0411	T	W	1996-	8510	6318			199	9605	28
CA	2223962			AA		1996	1219	С	'A	1996-	2223	962			199	9606	503
AU	9659683			A1		1996	1230	A	U	1996-	5968	3			199	9606	503
AU	697295			B2		1998	1001										
EP	830344			A1		1998	0325	E	EΡ	1996-	9169	77			199	9606	503
EP	830344			B1	:	2001	1128										
	R: AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE	, I	PT,	ΙE,
	SI,	LT,	LV,	FI													
CN	1192204			Α		1998	0902	C	N.	1996-	1958	85			199	606	503
JP	11506752			T2	:	1999	0615	J	ſΡ	1997-	5009	93			199	606	503
BR	9608557			Α	:	1999	0706	В	3R	1996-	8557				199	606	503
NZ	309498			Α	:	2000	0929	N	ΙZ	1996-	3094	98			199	606	503
AT	209635			E	:	2001	1215	Α	T	1996-	9169	77			199	606	503
ES	2165501			Т3		2002	0316	E	S	1996-	9169	77			199	606	03
PT	830344			T	:	2002	0429	P	Т	1996-	9169	77			199	606	03
ZA	9604622			Α	:	1997:	1204	Z	Ά	1996-	4622				199	606	04
PRIORITY	APPLN.	INFO	. :					U	IS	1995-	4778	42		Α	199	9506	07
								W	Ю	1996-	US83	74		W	199	606	03
OTHER SC	URCE(S):			CASI	REAC	Г 120	5:131	L460;	M	ARPAT	126	:1314	460				

GI

$$R^3$$
 R^4
 N
 R^2
 R^2
 R^2

AB The title compds. [I; R1 = C1-6 alkyl, CF3, pyridinyl; R2 = H, C1-6 alkyl, (un)substituted C7-10 arylalkyl, etc.; R3, R4 = H, C1-6 alkyl, halo, NO2], useful as inhibitors of smooth muscle cell proliferation, were prepared Thus, treatment of Et butyroimidate. HCl with 4-nitro-1,2-phenylenediamine in EtOH followed by treatment of the resulting 2-propyl-5-nitroindole with NaH in DMF and addition of Et 4-(bromomethyl)benzoate afforded I [R1 = Pr; R2 = 4-EtOCOC6H4CH2; R3 = 5-NO2; R4 = H] which showed IC50 of 0.66 μM and 0.76 μM against porcine smooth muscle cell proliferation when cells were maximally stimulated with serum or PDGF, resp.

L27 ANSWER 52 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:116575 HCAPLUS

DOCUMENT NUMBER:

126:131459

TITLE:

Preparation of 2-benzylthiobenzimidazoles as inhibitors of smooth muscle cell proliferation

INVENTOR(S):

Elokdah, Hassan Mahmoud; Sie-Yearl, Chai;

Sulkowski, Theodore Sylvester

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE: PCT Int. Appl., 26 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9640645	· A1	19961219	WO 1996-US8373	19960603

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AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG,
              KP, KR, LK, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO,
          SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR;
              IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML,
              MR, NE, SN, TD, TG
     US 5684030
                                   19971104
                                                US 1995-482600
                            Α
                                                                          19950607
     TW 411333
                            В
                                   20001111
                                                 TW 1996-85106316
                                                                          19960528
     CA 2223939
                            AA
                                   19961219
                                                 CA 1996-2223939
                                                                          19960603
     AU 9660303
                            A1
                                   19961230
                                                AU 1996-60303
                                                                          19960603
     AU 699503
                            B2
                                   19981203
     EP 830346
                            A1
                                   19980325
                                                EP 1996-917920
                                                                          19960603
             AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE,
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              SI, LT, LV, FI
     CN 1192207
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                                                                          19960603
     JP 11506751
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                                                JP 1996-500992
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     BR 9609311
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                                   19990706
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                                                                          19960603
     ZA 9604621
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                                   19971204
                                                ZA 1996-4621
                                                                          19960604
PRIORITY APPLN. INFO.:
                                                US 1995-482600
                                                                          19950607
                                                WO 1996-US8373
                                                                          19960603
OTHER SOURCE(S):
                           MARPAT 126:131459
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GI

$$\begin{array}{c|c}
R^3 & \searrow & S + CH_2 \downarrow_{n} R^1 \\
\downarrow_{R^2} & & & \\
\end{array}$$

AB The title compds. [I; R1 = substituted Ph; R2 = H, C1-6 alkyl, etc.; R3, R4 = H, C1-6 alkyl, halo, NO2; n = 1-3], useful as inhibitors of smooth muscle cell proliferation, were prepared by reaction of the corresponding 1H-benzimidazol-2-thiol with the substituted benzyl bromide. Compound I.HCl [R1 = 4-MeOCOC6H4; R2-R4 = H] showed 1.53 μ M and 3.74 μ M against porcine smooth muscle cell proliferation when cell were maximally stimulated with serum or PDGF, resp.

L27 ANSWER 53 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

Ι

ACCESSION NUMBER:

1997:113845 HCAPLUS

DOCUMENT NUMBER:

126:195251

TITLE:

2-(substituted sulfanyl)-3,5-dihydro-imidazol-4-one derivatives, and preparation thereof, for increasing

HDL cholesterol levels

INVENTOR (S):

Sulkowski, Theodore S.; Strike, Donald P.;

Elokdah, Hassan M.

PATENT ASSIGNEE(S):

American Home Products Corp., USA

SOURCE:

U.S., 8 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5599829	A	19970204	US 1995-563841	19951128
CA 2238812	AA	19970605	CA 1996-2238812	19961125

WO 9719931 19970605 WO 1996-US19108 **A1** W: AL, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KP, KR, LK, LR, LT, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG AU 9710634 **A**1 19970619 AU 1997-10634 19961125 19961125 EP 876354 **A1** 19981111 EP 1996-941513 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, FI, RO JP 2000514401 T2 20001031 JP 1997-520711 19961125 ZA 1996-9927 ZA 9609927 19980526 Δ 19961126 PRIORITY APPLN. INFO.: US 1995-563841 A 19951128 US 1995-7653P P 19951128 WO 1996-US19108 W 19961125 OTHER SOURCE(S): MARPAT 126:195251 GI

RN N

Ι

AB A method for increasing blood serum HDL cholesterol levels in a mammal comprises administering an effective amount of I (R = Ph, optionally substituted with ≥1 of halo, alkyl, perfluoroalkyl, alkoxy, perfluoroalkoxy, OH, alkanoyloxy, aroyloxy, arylalkanoyloxy; R3 = alkyl, aryl, or arylalkyl) or a pharmaceutically acceptable salt thereof. Preparation of 2-ethylsulfanyl-3-(4-fluorophenyl)-3,5-dihydroimidazol-4-one and 13 other compds. is described; HDL cholesterol-increasing activity for these compds. is reported.

L27 ANSWER 54 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:111148 HCAPLUS

DOCUMENT NUMBER: 126:117875

TITLE: Preparation of diheterocyclic acrylonitriles as smooth

muscle cell proliferation inhibitors

INVENTOR(S): Elokdah, Hassan Mahmoud; Sie-Yearl, Chai;

Sulkowski, Theodore Sylvester

PATENT ASSIGNEE(S): American Home Products Corporation, USA

SOURCE: PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 9639387
                                               WO 1996-US8376
                            A1
                                  19961212
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             AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG,
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         SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR,
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              MR, NE, SN, TD, TG
     US 5710164
                                  19980120
                                               US 1995-470603
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                                                                         19950606
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                            A1
                                  19961224
                                               AU 1996-60304
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     AU 711619
                            B2
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     EP 835244
                            A1
                                               EP 1996-917921
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                                  20011205
     EP 835244
                            В1
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              SI, LT, LV, FI
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     NZ 309995
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     AT 210120
                           Ε
                                  20011215
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                                                                         19960603
     ES 2166447
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                                               ES 1996-917921
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     PT 835244
                            Т
                                  20020429
                                               PT 1996-917921
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     ZA 9604620
                            Α
                                  19971204
                                               ZA 1996-4620
                                                                         19960604
PRIORITY APPLN. INFO.:
                                               US 1995-470603
                                                                     A 19950606
                                               WO 1996-US8376
                                                                     W 19960603
OTHER SOURCE(S):
                           CASREACT 126:117875; MARPAT 126:117875
```

AB The title compds. [I; Ar1, Ar2 = pyridinyl, quinolinyl, dihydro-1,4-benzodioxinyl, pyrrolyl, azaindolyl, carbazolyl], or their salts, useful as inhibitors of smooth muscle cell proliferation, were prepared Thus, condensation of 3-pyridylacetonitrile with 4-pyridylcarboxaldehyde in the presence of NaOMe/MeOH in EtOH afforded 48% (Z)-I [Ar1 = 4-pyridinyl; Ar2 = 3-pyridinyl] which showed IC50 of 1.159 and 0.346 µM against porcine smooth muscle cell proliferation when cells were maximally stimulated with serum or PDGF, resp.

L27 ANSWER 55 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:101668 HCAPLUS

DOCUMENT NUMBER:

126:117976

TITLE:

SOURCE:

Preparation of styrylbenzimidazoles as inhibitors of

smooth muscle cell proliferation

INVENTOR(S): Chai, Sie-yearl; Elokdah, Hassan Mahmoud;

Sulkowski, Theodore Sylvester

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT NO.																		
		A1 19961212																
							BR,											
		ΚP,	KR,	LK,	LR,	LT,	LV,	MD,	MG,	MK,	MN,	MX,	NO,	NZ,	PL,	PT,	RO,	
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	RW:	KΕ,	LS,	MW,	SD,	SZ,	ŪĠ,	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GB,	GR,	
							PT,											
					TD,													
US	6444	694			B1		2002	0903	ī	JS 1	995-	4682	71		1	9950	606	
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AU	9659	684			A1		1996	1224	7	AU 1	996-	59684	4		1	9960	603	
AU	7119	65			В2		1999	1028										
EP	8303	45			A1		1998	0325	1	EP 19	996-	9169	78		1:	9960	603	
EP	8303	45			B1		2001	0905										
	R:	ΑT,	BE,	CH,	DΕ,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	PT,	ΙE,	
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CN	1192	206			Α		1998	0902	(CN 19	996-1	19586	50		1	9960	603	
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NZ	30945 20515	99			Α		2000	0825	1	VZ 19	996-3	30949	99		1:	9960	603	
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	2162				Т3		2001	1216]	ES 19	996-9	91697	78		1:	9960	603	
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					Α		1997	1205										
PRIORITY	APP	LN.	INFO	.:					τ	JS 19	995-4	16827	71	7	A 19	950	506	
									V	VO 19	996-t	JS837	75	1	V 1	9960	503	
OTHER SO	DURCE	(S):			CASE	REAC	T 12	5:117	7976	MAI	RPAT	126	: 1179	976				

 $R \longrightarrow N \longrightarrow R^2$

R1

Ι

GI

AB The title compds. [I and II; R = (un)substituted Ph, furyl, pyridyl, quinolinyl; R1, R2 = H, halo, alkyl, etc.; R3 = H, alkyl, aryl, arylalkyl; R4, R5= H, alkyl] or their salts, useful as inhibitors of smooth muscle cell proliferation, were prepared Thus, treatment of 3,4-dimethoxycinnamonitrile with HCl gaseous in EtOH followed by reaction of 1,2-phenylenediamine with the resulting Me (3,4-dimethoxy)cinnamoimidate.HCl in MeOH afforded 67% I which showed IC50 of 5.91 μ M and 4.1 μ M against porcine smooth muscle cell proliferation when cells were maximally stimulated with serum or PDGF, resp.

L27 ANSWER 56 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1997:97265 HCAPLUS

DOCUMENT NUMBER:

126:117977

TITLE:

Preparation of benzoylbenzimidazoles and related

II

compounds as inhibitors of smooth muscle cell

proliferation.

INVENTOR(S):

Elokdah, Hassan Mahmoud; Sie-Yearl, Chai;

Sulkowski, Theodore Sylvester

PATENT ASSIGNEE(S):

American Home Products Corporation, USA

SOURCE:

PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATE					APPLICATION NO.																
WO 9	639390		WO 1996-US8353																		
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EP 8	30343			A1		1998	0325		ΕP	1996	5-9	169	65			19960	603				
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CN 1	192205			A		1998	0902		CN	1996	5-1	958	88			19960	603				
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								1	WO	1996	5 - U	S83	53		W	19960	603				
OTHER SOU	RCE(S)	:		MARE	PAT	126:	11797	77									•				

$$CX$$
 N
 $NR1$

AB Title compds. [I; R = alkyl, (substituted) Ph, PhCH2; R2 = H, halo, alkoxy, alkyl; R1 = H, alkyl, aryl, arylalkyl, substituted PhCH2; X = O, (H,OH)], were prepared Thus, Ph (2-propyl-1H-benzimidazol-5-yl)methanone (preparation given) in DMF was treated with NaH and then with Me 4-bromomethylbenzoate and the mixture was stirred 4 h to give 4-(5-benzoyl-2-propylbenzimidazol-1-ylmethyl)benzoic acid Me ester. This was converted to the Et ester, which showed IC50 = 1.04 μM for inhibition of porcine smooth muscle cell proliferation.

L27 ANSWER 57 OF 57 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:580563 HCAPLUS

DOCUMENT NUMBER:

125:275874

TITLE:

Use of 2-thioxo-imidazolidin-4-one derivatives in the

treatment of atherosclerosis

INVENTOR(S):

Elokdah, Hassan M.; Chai, Sie-yearl; Sulkowski, Theodore S.; Strike, Donald P.

PATENT ASSIGNEE(S): American Home Products Corporation, USA

English

SOURCE: U.S., 15 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

LANGUAGE:

P	PATENT NO.																			
- บ	S 555	5 5554607			A 19960910				US	199	95-5	5633		19951128						
C	A 223	2238762			AA	AA 19970605				CA	199	96-2	2238	762	19961125					
		9719932																		
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JP 2000501100					T2		JΡ	199	97-5	5207										
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OTHER SOURCE(S):					MARI	·AI	125:	2758	/4											

THER SOURCE(S): MARPAT 125:275874

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AB A method for increasing the HDL cholesterol concentration in the blood of a mammal comprises administration of a title compound I [R = alkyl, (un) substituted aromatic N, O or S heterocycle, aryl, aralkyl, benzhydryl, or indanyl (in which the substituents are 1-3 members selected from alkyl, alkoxy, alkylthio, alkenyl, alkynyl, halo, perfluoroalkyl, perfluoroalkoxy, or OH); R1 = alk(en/yn)yl, (un) substituted aryl (in which the substituents are 1-3 members selected from alk(en/yn)yl, alkoxy, alkylthio, halo, perfluoroalkyl, perfluoroalkoxy, or OH)]. Over 60 compds. were prepared For instance, reaction of BrCH2CO2Et with HC.tplbond.CCH2NH2 in Et2O at 0° to room temperature gave HC.tplbond.CCH2NHCH2CO2Et, which reacted with 2,6-dimethylphenyl isothiocyanate and Et3N in refluxing CH2Cl2 to give title compound II. At